User Manual

DIR-618

Version 1.0

D-Link®

WIRELESS

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Package Contents

- D-Link DIR-618 wireless router
- power adapter
- Ethernet Cable
- CD-ROM with User Manual, and warrenty

Note: Using a power supply with a different voltage rating than the one included with the DIR-618 will cause damage and void the warranty for this product.

Note: each time power on, first please plug the power cord into the power receptor of the device, and the other end into the power socket on the wall.

System Requirements

- Ethernet-based Cable or DSL Modem
- Computers with Windows®, Macintosh,® or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer Version 6.0, or Firefox 2.0 and above (for configuration)

Feature

- Faster wireless network - The DIR-618 provides up to 300Mbps* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.

- Compatible with 802.11b and 802.11g Devices - The DIR-618 is still fully compatible with the IEEE 802.11b and 802.11g standard, so it can connect with existing 802.11b and IEEE 802.11g PCI, USB and Cardbus adapters.

- Advaced firewall feature- The web-based user interface displays many advanced network management features including :

    - Content Filter - Easily applied content filtering based on MAC Address, and/or parent control.

    - Filter Scheduling - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.

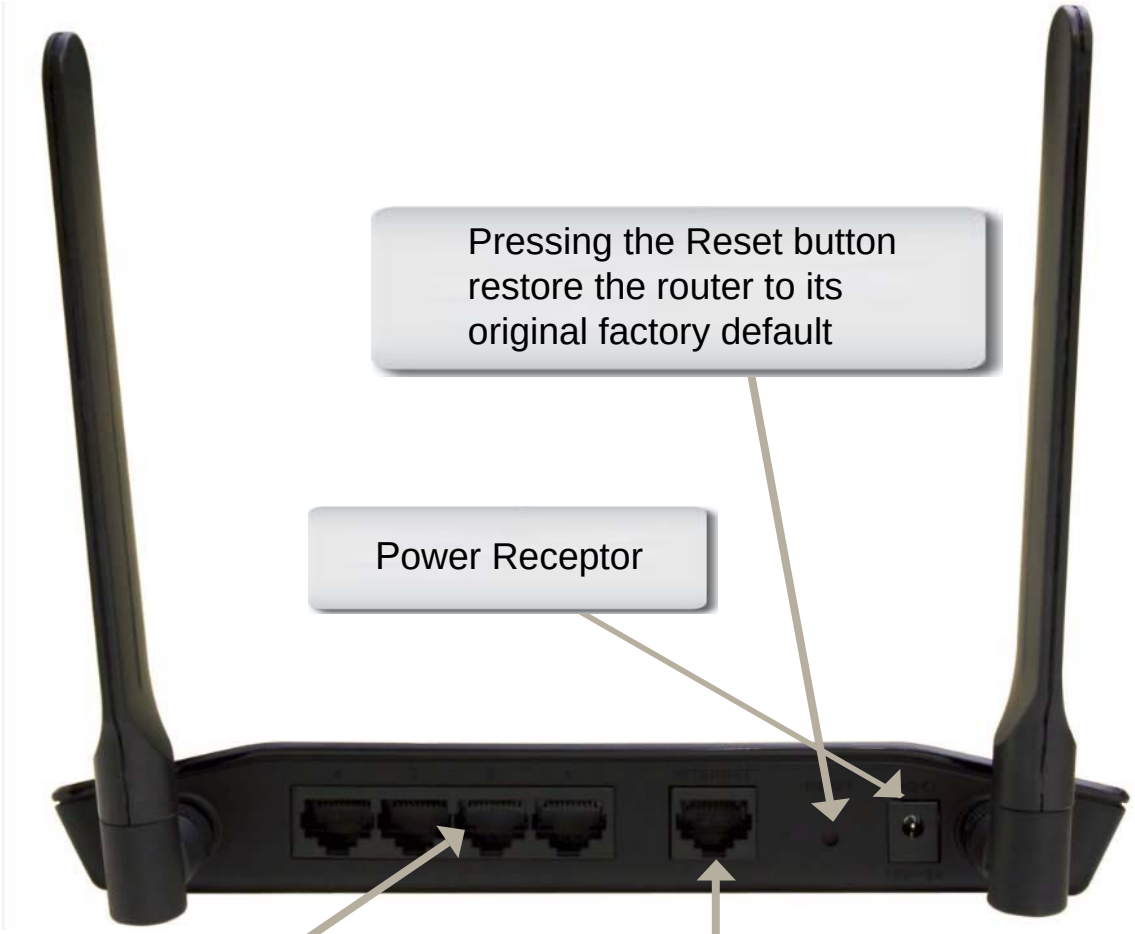
    - Secure Multiple/Concurrent Sessions - The DIR-618 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-618 can securely access corporate networks.

- User-friendly Setup Wizard - Through its easy-to-use Web-based user interface, the DIR-618 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11g and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

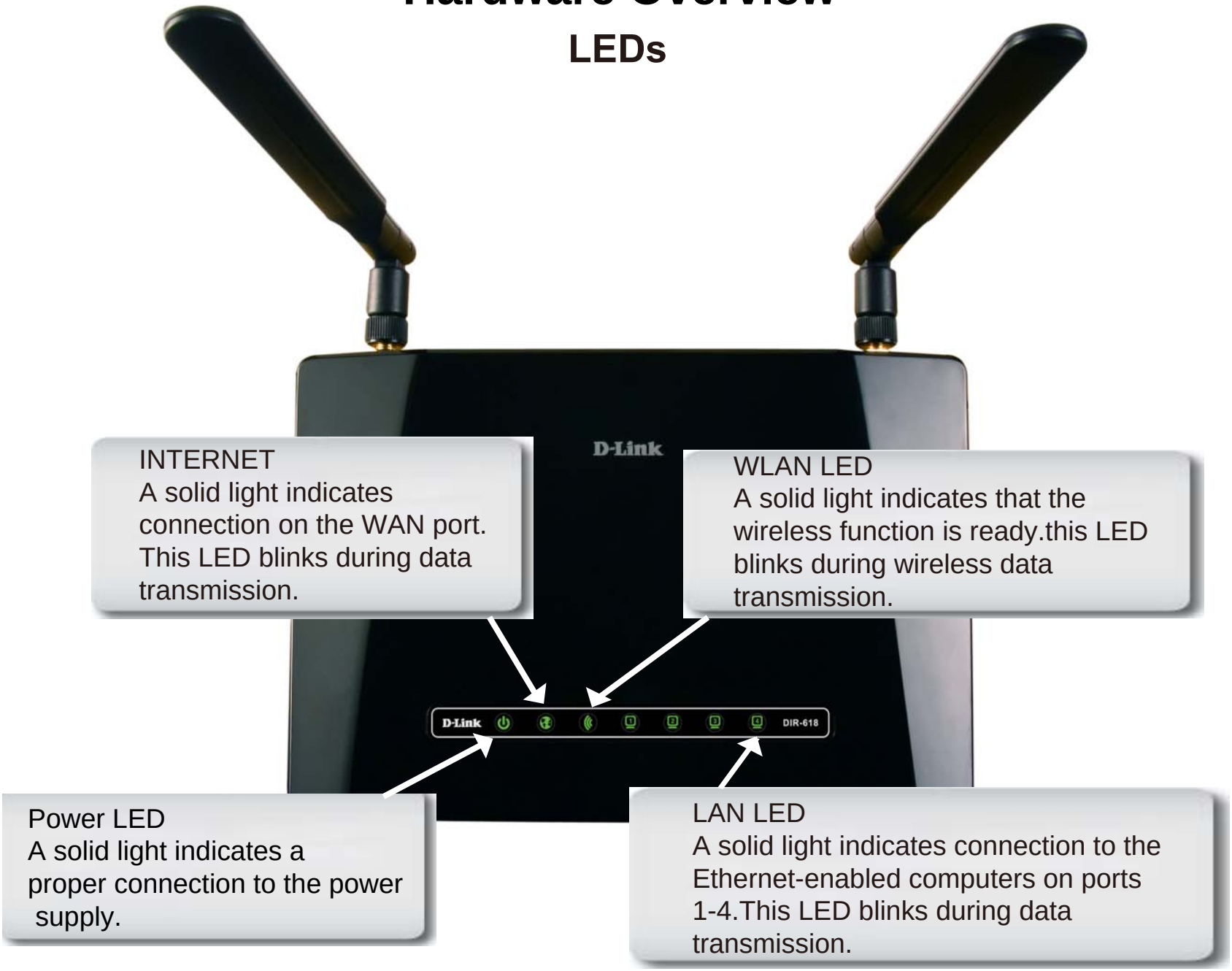
Hardware Overview

Connections


Pressing the Reset button restore the router to its original factory default
Power Receptor
LAN Port
connect Ethernet device such as computers, switches and hubs
Auto MDI/MDIX WAN port is the connection for the Ethernet cable to the cableor DSL modem

Hardware Overview

LEDs


INTERNET
A solid light indicates connection on the WAN port. This LED blinks during data transmission.
WLAN LED
A solid light indicates that the wireless function is ready.this LED blinks during wireless data transmission.
Power LED
A solid light indicates a proper connection to the power supply.
LAN LED
A solid light indicates connection to the Ethernet-enabled computers on ports 1-4.This LED blinks during data transmission.
D-Link
DIR-618

Installation

this section will walk you through the installation process. Placement of the router is very important. Please do not put the router in an enclosed area such as closet, cabinet, or in the attic or garage.

Before you Begin

Please configure the router with the computer that was last connected directly to your modem. Also, you can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).

If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

Wall Mounting Your Device

You can mount the DIR-618 to a wall or a partition for easy and convenient placement of your device.

To wall mount your device,

A. Screw the provided screws with the equipment to the wall or partition where the device to be placed.
B. Place the mounting holes on the bottom of the device over the screws to mount it to the wall or partition.
C. Connect your cables to the device.

Step A

Step B

Step C

Connect to Cable/DSL/Satellite Modem

If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

1. Place the router in an open and central location.

2. Turn the power off on your modem. If there is no on/off switch, then unplug the modem's power adapter. Shut down your computer.

3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and place it into the WAN port on the router.

4. Plug an Ethernet cable into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.

5. Turn on or plug in your modem. Wait for the modem to boot (about 30 seconds).

6. Plug the power adapter to the router and connect to an outlet or power strip. Wait about 30 seconds for the router to boot.

7. Turn on your computer.

8. Verify the link lights on the router. The power light, WAN light, and the LAN light (the port that your computer is plugged into) should be lit. If not, make sure your computer, modem, and router are powered on and verify the cable connections are correct.

9. Skip to page 16 to configure your router.

Connect to Another Router

If you are connecting the D-Link router to another router to use as a wireless access point and/or switch, you will have to do the following before connecting the router to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.

2. Open a web browser and enter **http://192.168.0.1** and press **Enter**. When the login window appears, set the user name to **admin** and leave the password box empty. Click **OK** to continue.

3. Uncheck the Enable UPnP checkbox. Click **Save Settings** to continue.

4. Uncheck the Enable DHCP Server server checkbox. Click **Save Settings to continue.**

5. Under Router Settings, enter an available IP address and the subnet mask of your network. Click Save Settings to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.

6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.

7. Connect an Ethernet cable in one of the LAN ports of the router and connect it to your other router. Do not plug anything into the WAN port of the D-Link router.

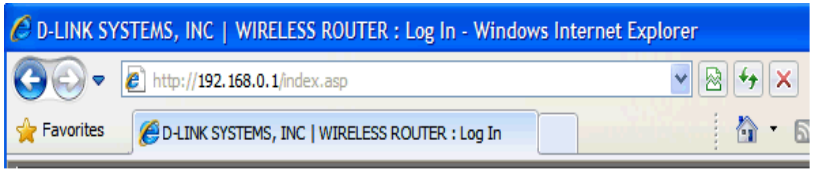
8. You may now use the other three LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** and **Wireless Security** sections for more information on setting up your wireless network.

Configuration

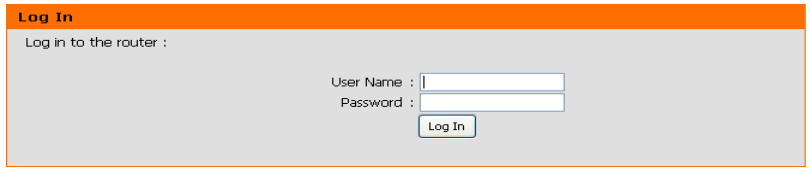
This section will show you how to configure your new D-Link wireless router using the web-based configuration utility.

Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).


D-LINK SYSTEMS, INC | WIRELESS ROUTER : Log In - Windows Internet Explorer
http://192.168.0.1/index.asp
Favorites
D-LINK SYSTEMS, INC | WIRELESS ROUTER : Log In

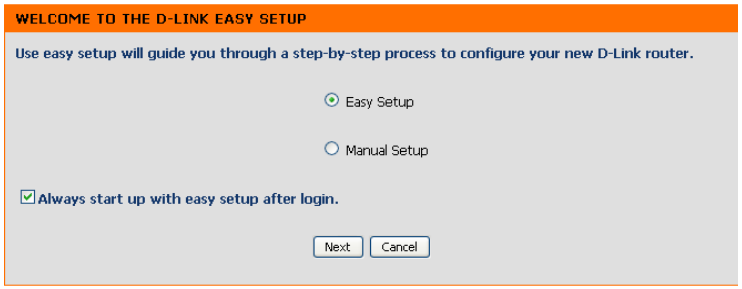
Enter the user name (admin) and your password. Leave the password blank by default.



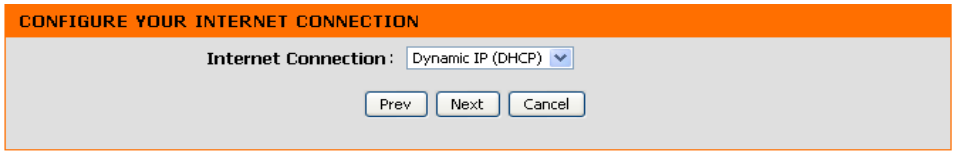
If you get a Page Cannot be Displayed error, please refer to the Troubleshooting section for assistance.

Configuration Wizard

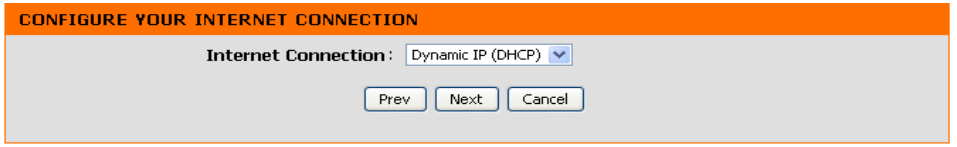
You may run the setup wizard from the opening quick setup window to quickly set up your router. Click **Quick Setup** , you will be directed to the first window of the wizard.


WELCOME TO THE D-LINK EASY SETUP
Use easy setup will guide you through a step-by-step process to configure your new D-Link router.
Easy Setup
Manual Setup
Always start up with easy setup after login.
Next
Cancel

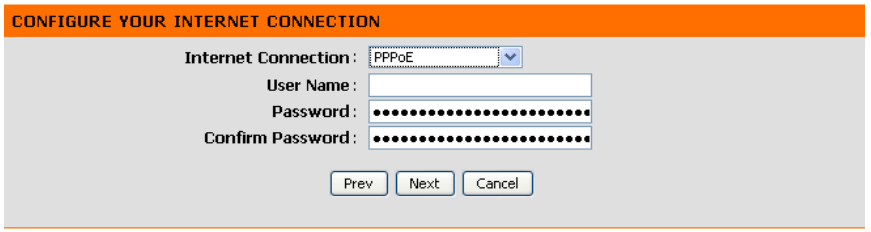
Select the type of Internet connection you use.



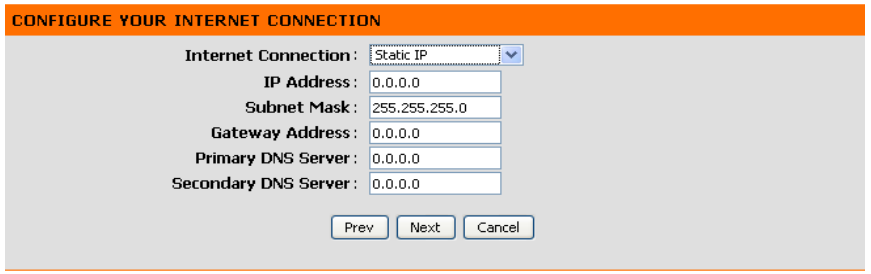
If you select dynamic IP, click Next Page to continue.



If you select PPPoE, enter your PPPoE username and password.Click Next to continue. If your ISP assigned IP address,subnetmask,gateway and DNS server address, then select static IP.

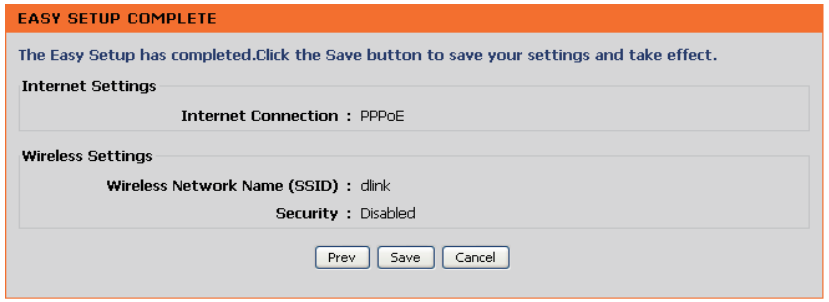


Enter the network settings provided by your Internet provider if you selected static IP address connection. Click Next to continue.

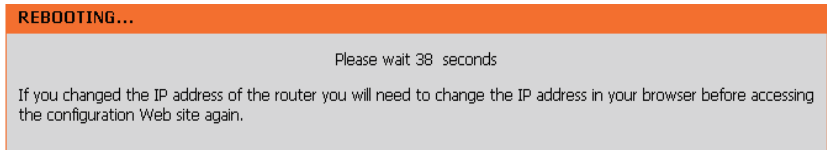


Set up the name of the wireless network and select the security mode of the wireless network.then click Next to continue.

This page displays the completed Internet and wireless configuration.Click **Save** to save your settings.

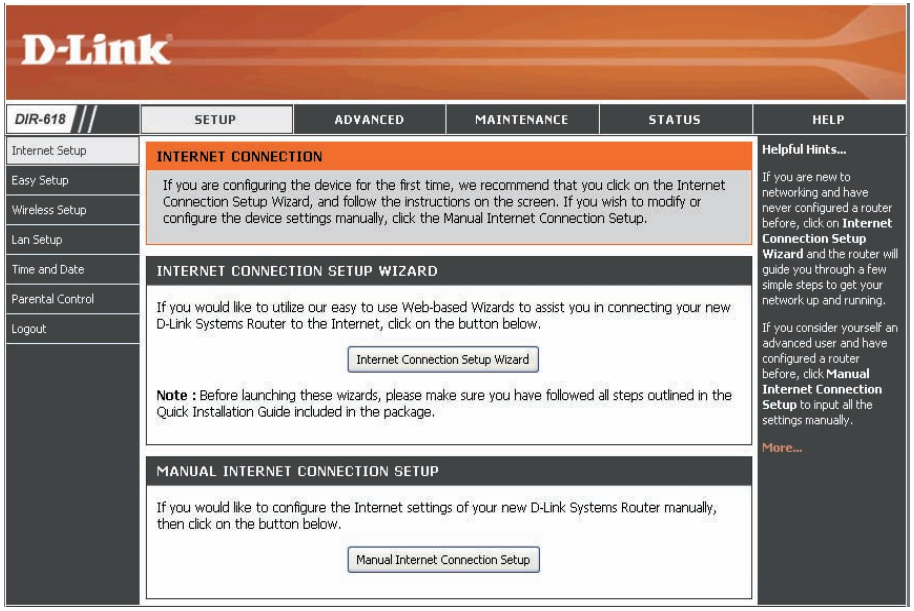


Please wait for rebooting. When the router has finished rebooting, the opening window will be displayed.


REBOOTING...
Please wait 38 seconds
If you changed the IP address of the router you will need to change the IP address in your browser before accessing the configuration Web site again.

Internet Setup

You may run the setup wizard from the opening Internet Setup window to quickly set up your router. Click Internet Connection Setup Wizard, you will be directed to the first window of the wizard.


D-Link
DIR-618
SETUP
ADVANCED
MAINTENANCE
STATUS
HELP
Internet Setup
Easy Setup
Wireless Setup
Lan Setup
Time and Date
Parental Control
Logout
INTERNET CONNECTION
If you are configuring the device for the first time, we recommend that you click on the Internet Connection Setup Wizard, and follow the instructions on the screen. If you wish to modify or configure the device settings manually, click the Manual Internet Connection Setup.
INTERNET CONNECTION SETUP WIZARD
If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.
Internet Connection Setup Wizard
Note : Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL INTERNET CONNECTION SETUP
If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.
Manual Internet Connection Setup
Helpful Hints...
If you are new to networking and have never configured a router before, click on Internet Connection Setup Wizard and the router will guide you through a few simple steps to get your network up and running.
If you consider yourself an advanced user and have configured a router before, click Manual Internet Connection Setup to input all the settings manually.
More...

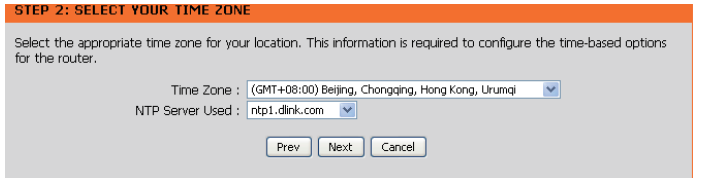
Click Next to continue.

WELCOME TO THE D-LINK SETUP WIZARD
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.
Step 1: Set your Password
Step 2: Select your Time Zone
Step 3: Select Wan Connection Mode
Step 4: Save Settings and Connect
Next
Cancel

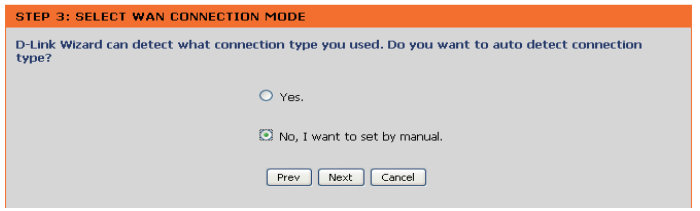
Create a new password and then click Next to continue.

STEP 1: SET YOUR PASSWORD
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below:
Password :
Confirm Password:
Prev
Next
Cancel

Select your time zone and NTP-server from the drop-down menu and then click **Next** to continue.


STEP 2: SELECT YOUR TIME ZONE
Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.
Time Zone : (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
NTP Server Used : ntp1.dlink.com
Prev
Next
Cancel

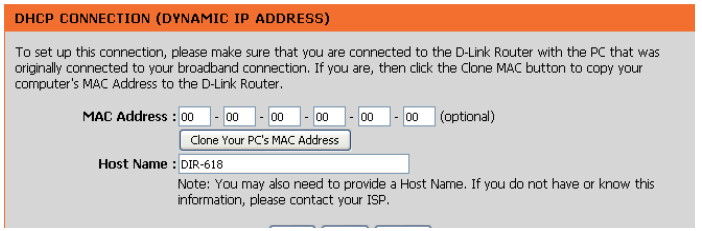
Select **No, I want to set by manual**


STEP 3: SELECT WAN CONNECTION MODE
D-Link Wizard can detect what connection type you used. Do you want to auto detect connection type?
Yes.
No, I want to set by manual.
Prev
Next
Cancel

Select the type of Internet connection you use and then click **Next** to continue.

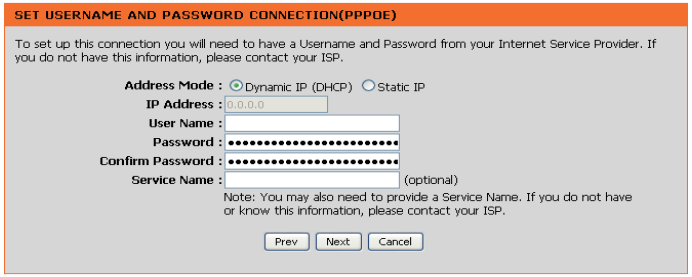
STEP 3: CONFIGURE YOUR INTERNET CONNECTION
DHCP Connection (Dynamic IP Address)
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.
Username / Password Connection(PPPoE)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this connection type of connection.
Username / Password Connection(PPTP)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this connection type of connection.
Username / Password Connection(L2TP)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this connection type of connection.
Static IP Address Connection
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.
Prev
Next
Cancel

If you selected Dynamic, you may need to enter the MAC address of the computer that was last connected directly to your modem. If you are currently using that computer, click **Clone Your PC's MAC Address** and then click **Next** to continue. The Host Name is optional but may be required by some ISPs. The default host name is the device name of the Router and may be changed.

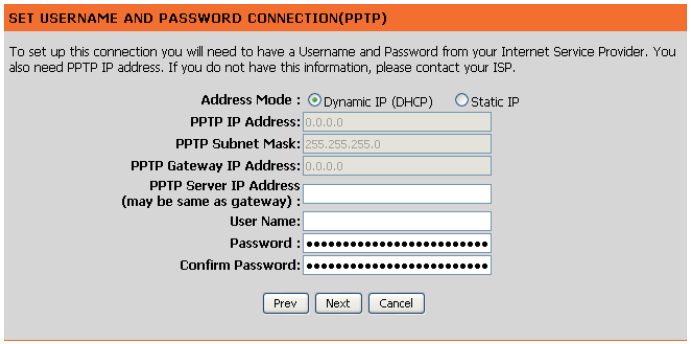

DHCP CONNECTION (DYNAMIC IP ADDRESS)
To set up this connection, please make sure that you are connected to the D-Link Router with the PC that was originally connected to your broadband connection. If you are, then click the Clone MAC button to copy your computer's MAC Address to the D-Link Router.
MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)
Clone Your PC's MAC Address
Host Name : DIR-618
Note: You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.

If you selected PPPoE, enter your PPPoE username and password. Click Next to continue.Select Static if your ISP assigned you the IP address,subnet mask,gateway, and DNS server addresses.

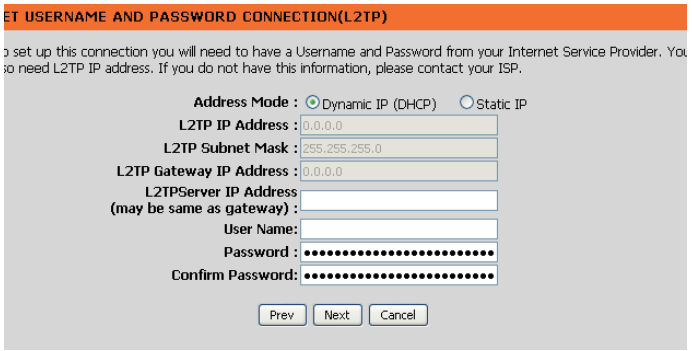
Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.


SET USERNAME AND PASSWORD CONNECTION(PPPOE)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP (DHCP) Static IP
IP Address : 0.0.0.0
User Name :
Password :
Confirm Password :
Service Name : (optional)
Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.
Prev Next Cancel

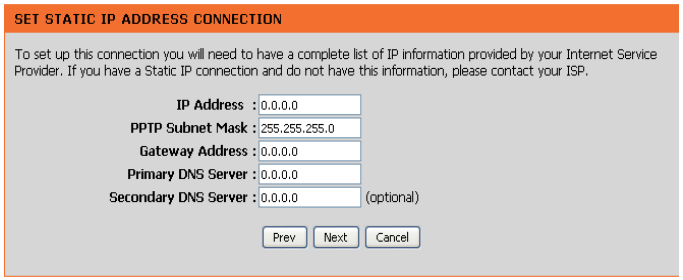
If you selected PPTP, enter your PPTP username and password. Click Next to continue.


SET USERNAME AND PASSWORD CONNECTION(PPTP)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP (DHCP) Static IP
PPTP IP Address: 0.0.0.0
PPTP Subnet Mask: 255.255.255.0
PPTP Gateway IP Address: 0.0.0.0
PPTP Server IP Address (may be same as gateway) :
User Name:
Password :
Confirm Password:
Prev Next Cancel

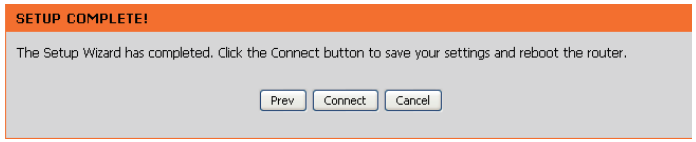
If you selected L2TP, enter your L2TP username and password. Click Next to continue.


ET USERNAME AND PASSWORD CONNECTION(L2TP)
o set up this connection you will need to have a Username and Password from your Internet Service Provider. You so need L2TP IP address. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP (DHCP) Static IP
L2TP IP Address : 0.0.0.0
L2TP Subnet Mask : 255.255.255.0
L2TP Gateway IP Address : 0.0.0.0
L2TPServer IP Address (may be same as gateway) :
User Name:
Password :
Confirm Password:
Prev Next Cancel

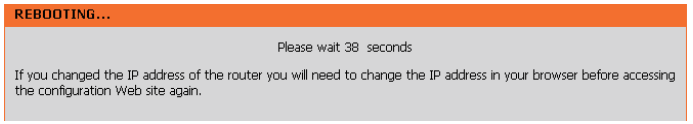
If you selected Static, enter your network settings supplied by your Internet provider. Click Next to continue.


SET STATIC IP ADDRESS CONNECTION
To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.
IP Address : 0.0.0.0
PPTP Subnet Mask : 255.255.255.0
Gateway Address : 0.0.0.0
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0 (optional)
Prev
Next
Cancel

Click Connect to save your settings.


SETUP COMPLETE!
The Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.
Prev
Connect
Cancel

Please allow 1-2 minutes for rebooting. When the router has finished rebooting, the opening window will be displayed.


REBOOTING...
Please wait 38 seconds
If you changed the IP address of the router you will need to change the IP address in your browser before accessing the configuration Web site again.

Internet Setup
Static (assigned by ISP)

Select Static IP Address if all WAN IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

IP Address: Enter the IP address assigned by your ISP.

Subnet Mask: Enter the Subnet Mask assigned by your ISP.

ISP Gateway Address: Enter the Gateway assigned by your ISP.

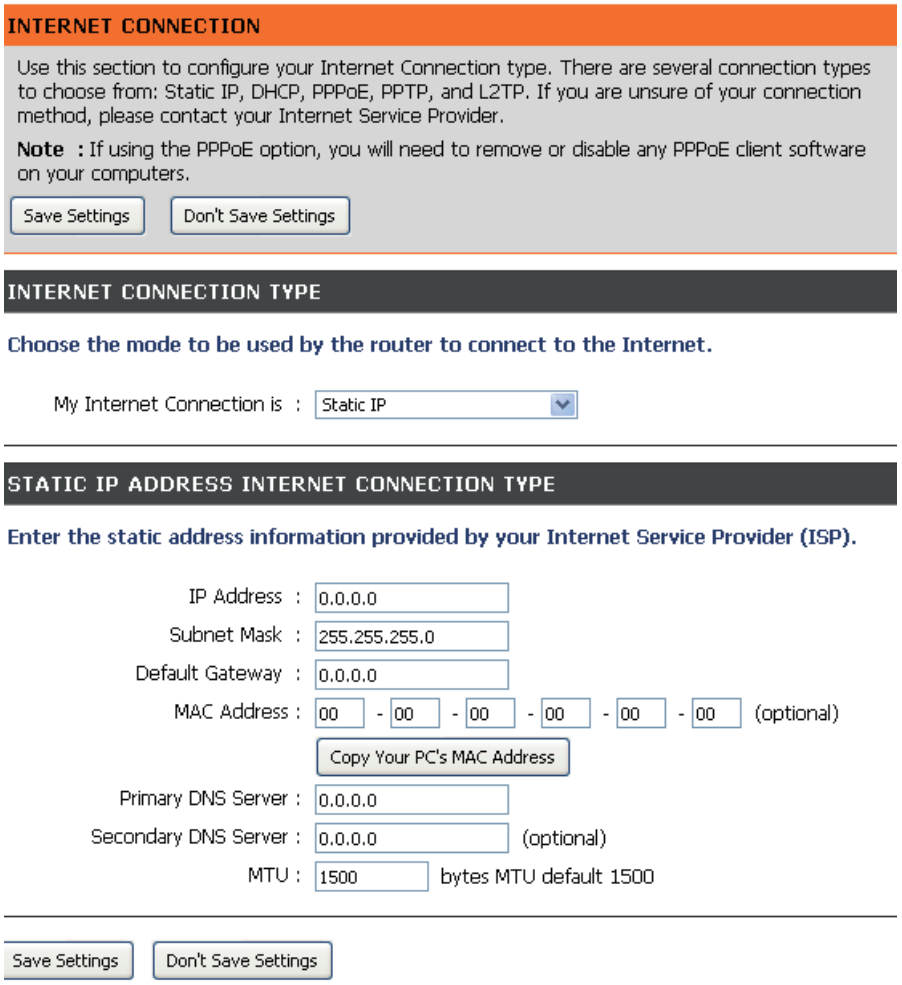
MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP.

Clone MAC Address: The default MAC address is set to the WAN's physical interface MAC address on the Broadband Router. You can use the Clone MAC Address button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

Primary DNS Address: Enter the Primary DNS server IP address assigned by your ISP.

Secondary DNS Address: This is optional.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : Static IP
STATIC IP ADDRESS INTERNET CONNECTION TYPE
Enter the static address information provided by your Internet Service Provider (ISP).
IP Address : 0.0.0.0
Subnet Mask : 255.255.255.0
Default Gateway : 0.0.0.0
MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)
Copy Your PC's MAC Address
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0 (optional)
MTU : 1500 bytes MTU default 1500
Save Settings
Don't Save Settings

Internet Setup

Dynamic

To manually set up the Internet connection, click the Manual Internet Connection Setup button on the Router's opening window.

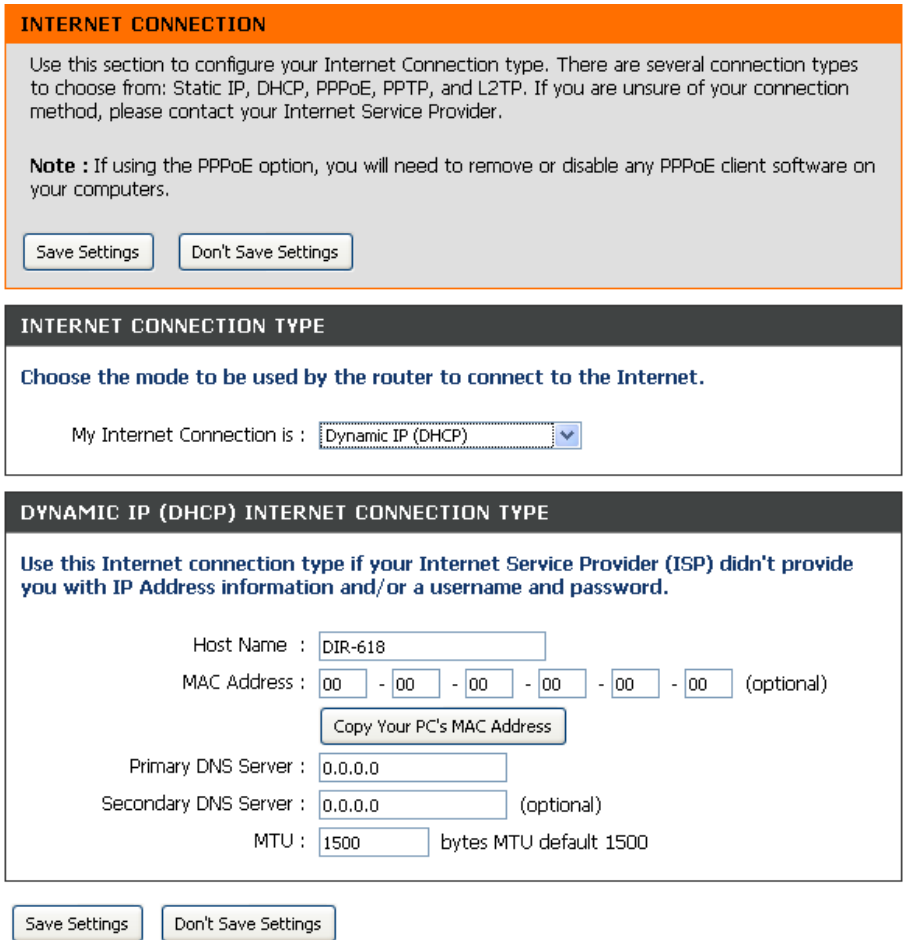
Host Name: The Host Name is optional but may be required by some ISPs. The default host name is the device name of the Router and may be changed.

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP.

Clone MAC Address: The default MAC address is set to the WAN's physical interface MAC address on the Broadband Router. You can use the "Clone MAC Address" button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

Primary / Secondary DNS Addresses: Enter the DNS (Domain Name Server) server IP address assigned by your ISP.the secondary DNS address is optional .

MTU: Maximum Transmission Unit - You may need to change the MTU for optimal performance with your specific ISP.


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : Dynamic IP (DHCP)
DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name : DIR-618
MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)
Copy Your PC's MAC Address
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0 (optional)
MTU : 1500 bytes MTU default 1500
Save Settings
Don't Save Settings

Internet Setup
PPPoE

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

PPPoE: Select Dynamic (most common) or Static . Select Static if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

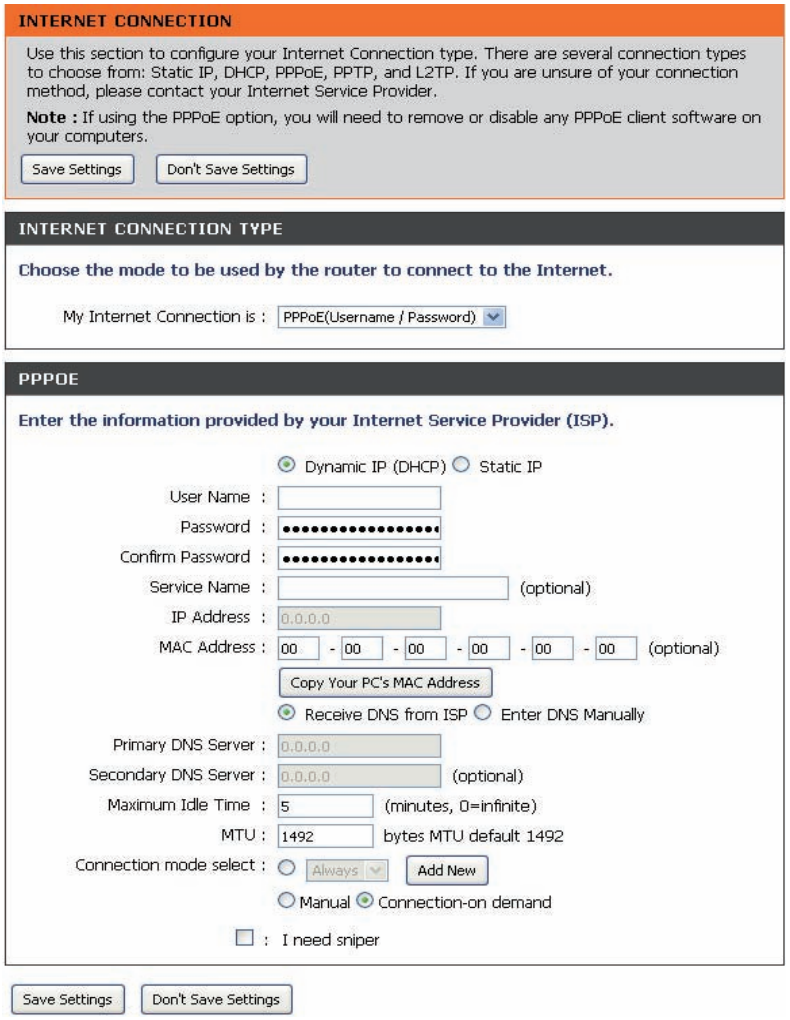
IP Address: Enter the IP address (Static PPPoE only).

DNS Addresses: Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

MTU: Maximum Transmission Unit - You may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

Connection Mode Select: Select either Always-on , Manual , or Connect-on demand .


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
PPPoE(Username / Password)
PPPOE
Enter the information provided by your Internet Service Provider (ISP).
Dynamic IP (DHCP)
Static IP
User Name :
Password :
Confirm Password :
Service Name :
(optional)
IP Address :
MAC Address :
(optional)
Copy Your PC's MAC Address
Receive DNS from ISP
Enter DNS Manually
Primary DNS Server :
Secondary DNS Server :
(optional)
Maximum Idle Time :
(minutes, 0=infinite)
MTU :
bytes MTU default 1492
Connection mode select :
Always
Add New
Manual
Connection-on demand
I need sniper
Save Settings
Don't Save Settings

Internet Setup
PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

PPTP: Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

IP Address: Enter the IP address (Static PPTP only).

Subnet Mask: Enter the Primary and Secondary DNS Server Addresses (Static PPTP only).

Gateway: Enter the Gateway IP Address provided by your ISP.

DNS: The DNS server information will be supplied by your ISP (Internet Service Provider.)

Server IP: Enter the Server IP provided by your ISP (optional).

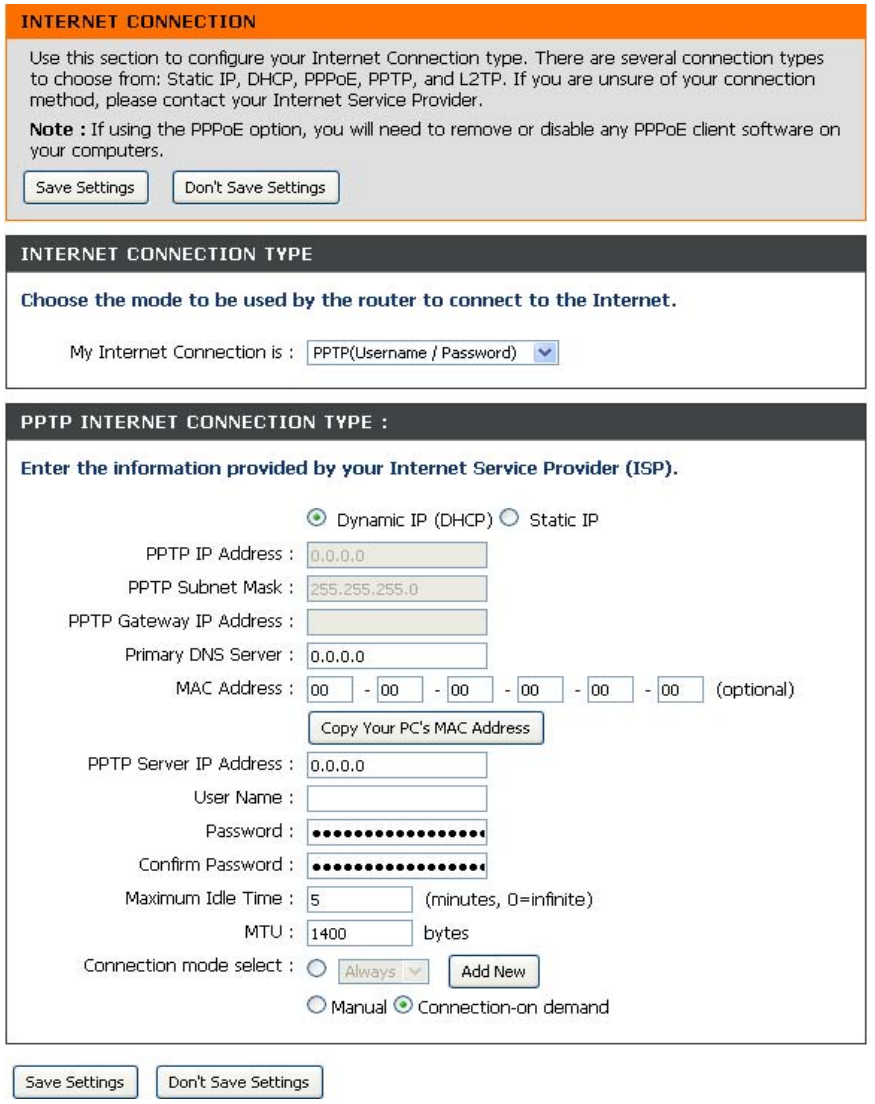
User Name: Enter your PPTP account name.

Password: Enter your PPTP password and then retype the password in the next box.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

MTU: Maximum Transmission Unit - You may need to change the MTU for optimal performance with your specific ISP

Connect Mode: Select either Always-on, Manual, or Connect-on demand.


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
PPTP(Username / Password)
PPTP INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Dynamic IP (DHCP)
Static IP
PPTP IP Address :
PPTP Subnet Mask :
PPTP Gateway IP Address :
Primary DNS Server :
MAC Address :
(optional)
Copy Your PC's MAC Address
PPTP Server IP Address :
User Name :
Password :
Confirm Password :
Maximum Idle Time :
(minutes, 0=infinite)
MTU :
bytes
Connection mode select :
Always
Add New
Manual
Connection-on demand
Save Settings
Don't Save Settings

Internet Setup

L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

L2TP: Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

IP Address: Enter the IP address (Static L2TP only).

Subnet Mask: Enter the Primary and Secondary DNS Server Addresses (Static L2TP only).

Gateway: Enter the Gateway IP Address provided by your ISP.

DNS: The DNS server information will be supplied by your ISP (Internet Service Provider.)

Server IP: Enter the Server IP provided by your ISP (optional).

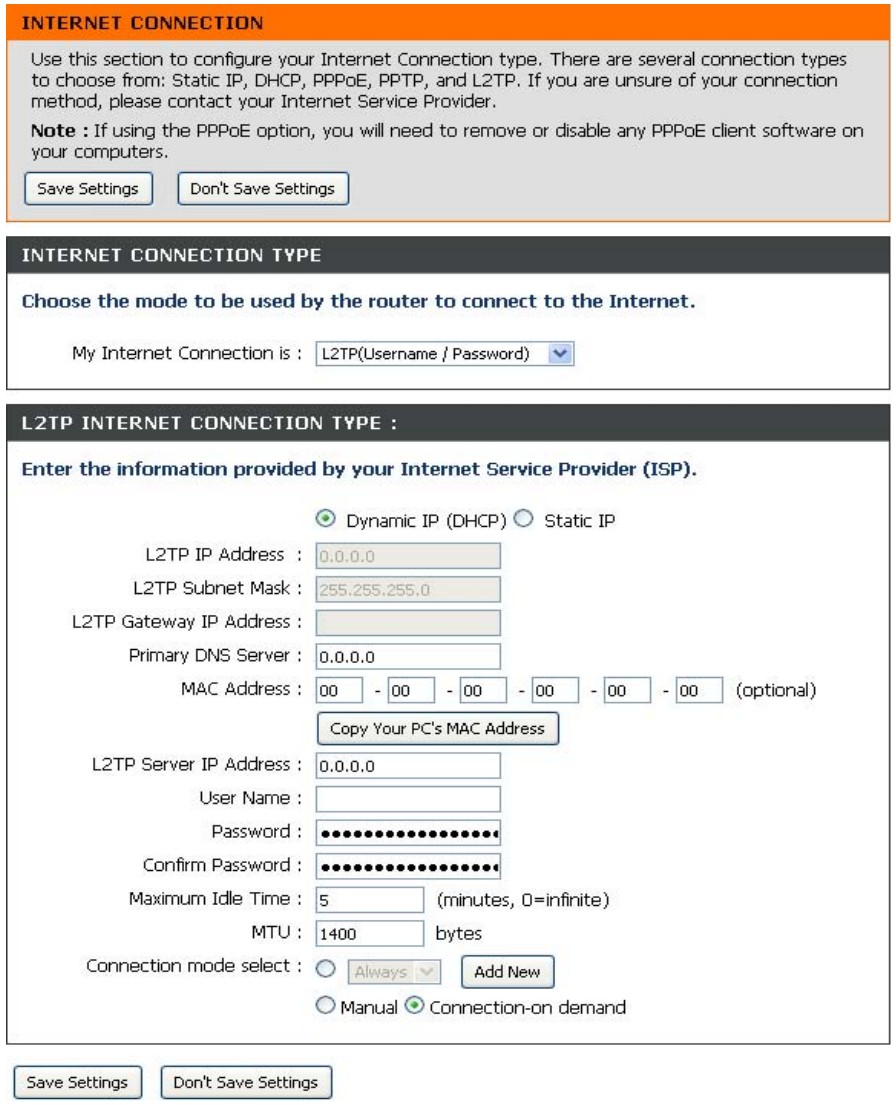
L2TP Account: Enter your L2TP account name.

L2TP Password: Enter your L2TP password and then retype the password in the next box.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

MTU: Maximum Transmission Unit - You may need to change the MTU for optimal performance with your specific ISP.

Connect Mode: Select either Always-on, Manual, or Connect-on demand.


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : L2TP(Username / Password)
L2TP INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Dynamic IP (DHCP) Static IP
L2TP IP Address : 0.0.0.0
L2TP Subnet Mask : 255.255.255.0
L2TP Gateway IP Address :
Primary DNS Server : 0.0.0.0
MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)
Copy Your PC's MAC Address
L2TP Server IP Address : 0.0.0.0
User Name :
Password :
Confirm Password :
Maximum Idle Time : 5 (minutes, 0=infinite)
MTU : 1400 bytes
Connection mode select : Always Add New
Manual Connection-on demand
Save Settings
Don't Save Settings

Internet Setup

DHCP+

Host Name: The Host Name is optional but may be required by some ISPs. The default host name is the device name of the Router and may be changed.

User Name: Enter your user name.

Password: Enter your password and then retype the password in the next box.

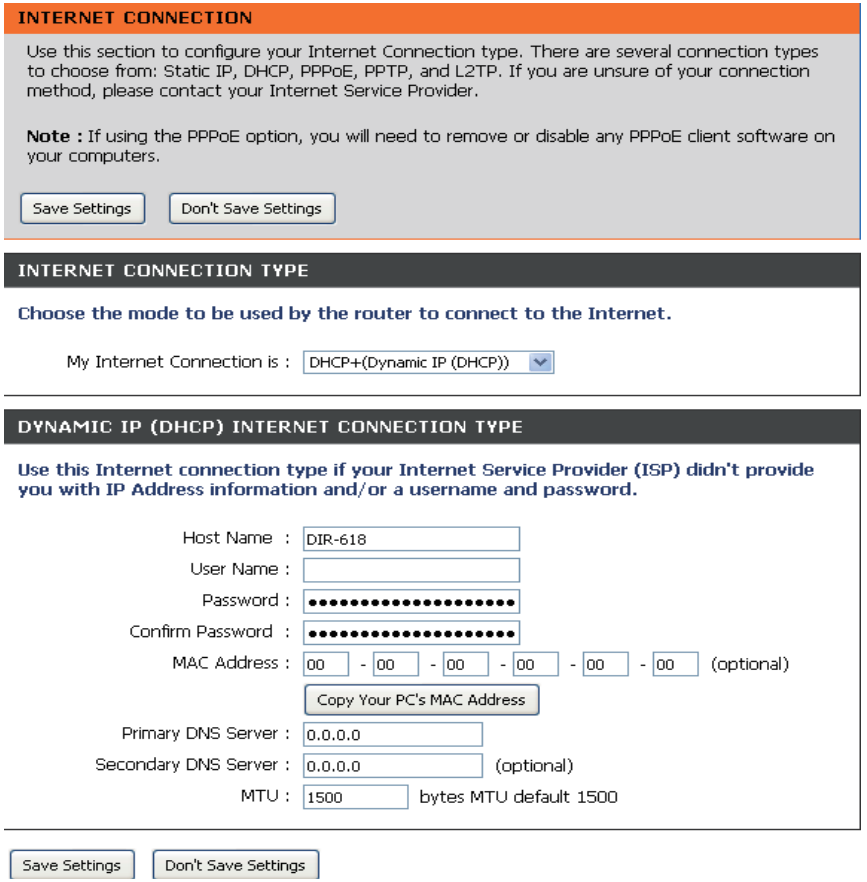
MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP.

Clone MAC Adddress: The default MAC address is set to the WAN's physical interface MAC address on the Broadband Router. You can use the "Clone MAC Address" button to copy the MAC address of the Ethernet Card installed by your ISP . It is not recommended that you change the default MAC address unless required by your ISP.

Primary DNS Address: Enter the DNS (Domain Name Server) server IP address assigned by your ISP.

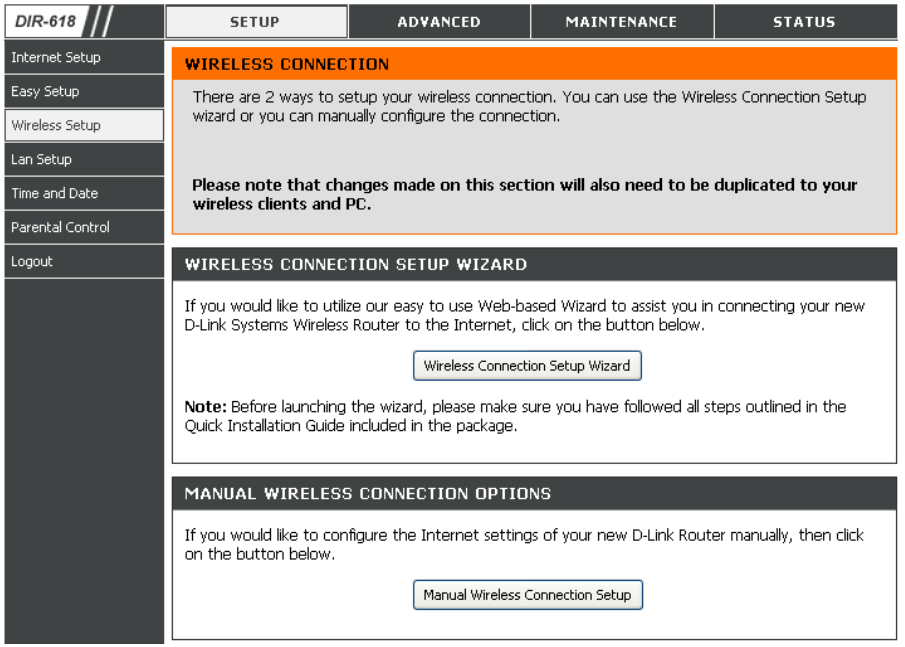
Secondary DNS Address: It's optional.

MTU : Maximum Transmission Unit - You may need to change the MTU for optimal performance with your specific ISP.


INTERNET CONNECTION
Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.
Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.
Save Settings
Don't Save Settings
INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
DHCP+(Dynamic IP (DHCP))
DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name : DIR-618
User Name :
Password :
Confirm Password :
MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)
Copy Your PC's MAC Address
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0 (optional)
MTU : 1500 bytes MTU default 1500
Save Settings
Don't Save Settings

Wireless Setup

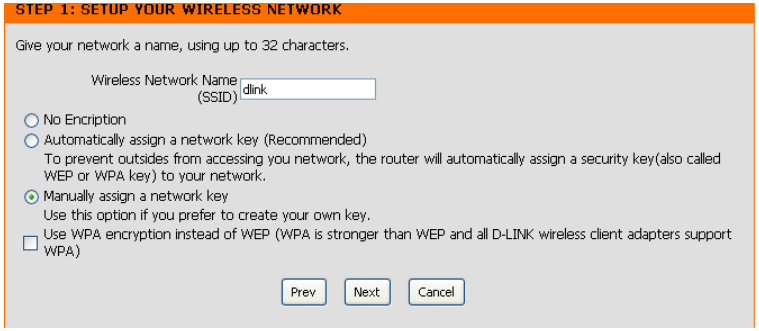
Wireless settings for the router may be configured manually or by using a wizard. To use the wizard, click the **Wireless Connection Setup Wizard** button and then follow the steps that are described below. To configure the wireless settings manually, click the **Manual Wireless Connection Setup** button. The parameters for this window are described later in this section. The Wireless Security section that directly follows this Configuration section provides additional explanation for how to configure the WEP, WPA, WPA2, and WPA/WPA2 wireless security mode options.


DIR-618
SETUP
ADVANCED
MAINTENANCE
STATUS
Internet Setup
Easy Setup
Wireless Setup
Lan Setup
Time and Date
Parental Control
Logout
WIRELESS CONNECTION
There are 2 ways to setup your wireless connection. You can use the Wireless Connection Setup wizard or you can manually configure the connection.
Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.
WIRELESS CONNECTION SETUP WIZARD
If you would like to utilize our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Wireless Router to the Internet, click on the button below.
Wireless Connection Setup Wizard
Note: Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL WIRELESS CONNECTION OPTIONS
If you would like to configure the Internet settings of your new D-Link Router manually, then click on the button below.
Manual Wireless Connection Setup

Click **Next** to continue.

WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD
This wizard will guide you through a step-by-step process to set up your wireless network and make it secure.
• Step 1: Set your Wireless Network.
• Step 2: Set your Wireless Security Password
Next
Cancel

Enter a Wireless Network Name in the textbox, which is also know as the SSID and select manually assign a network key. and then click **Next** to continue.


STEP 1: SETUP YOUR WIRELESS NETWORK
Give your network a name, using up to 32 characters.
Wireless Network Name (SSID)
dlink
No Encription
Automatically assign a network key (Recommended)
To prevent outsides from accessing you network, the router will automatically assign a security key(also called WEP or WPA key) to your network.
Manually assign a network key
Use this option if you prefer to create your own key.
Use WPA encryption instead of WEP (WPA is stronger than WEP and all D-LINK wireless client adapters support WPA)
Prev
Next
Cancel

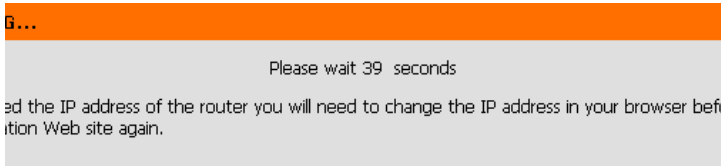
Enter a Wireless Security Password in the textbox and then click **Next** to continue.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD
You have selected your security level - you will need to set a wireless security password.
The WEP (Wired Equivalent Privacy) key must meet one of following guildelines:
- Exactly 5 or 13 characters
- Exactly 10 or 26 characters using 0-9 and A-F
A longer WEP key is more secure than a short one
Wireless Security Password :
Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.
Prev
Next
Cancel

This window displays a summary of your wireless security settings. Please print this out or record this information in a safe place and then click **Save** to continue.

SETUP COMPLETE!
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
Wireless Network Name (SSID) : dlink
Wep Key Length : 64 bits
Default WEP Key to Use : 1
Authentication : Open
Wep Key : 12345
Note: In some smart wireless ultilities (e.g. DLINK wireless ultility or wireless zero configuration), you only select Wireless Network Name and enter Network Key to access Internet.
Prev
Save
Cancel

The Router will save your new settings and reboot. When it is finished after 1-2 minutes, the opening Wireless Setup window is displayed.



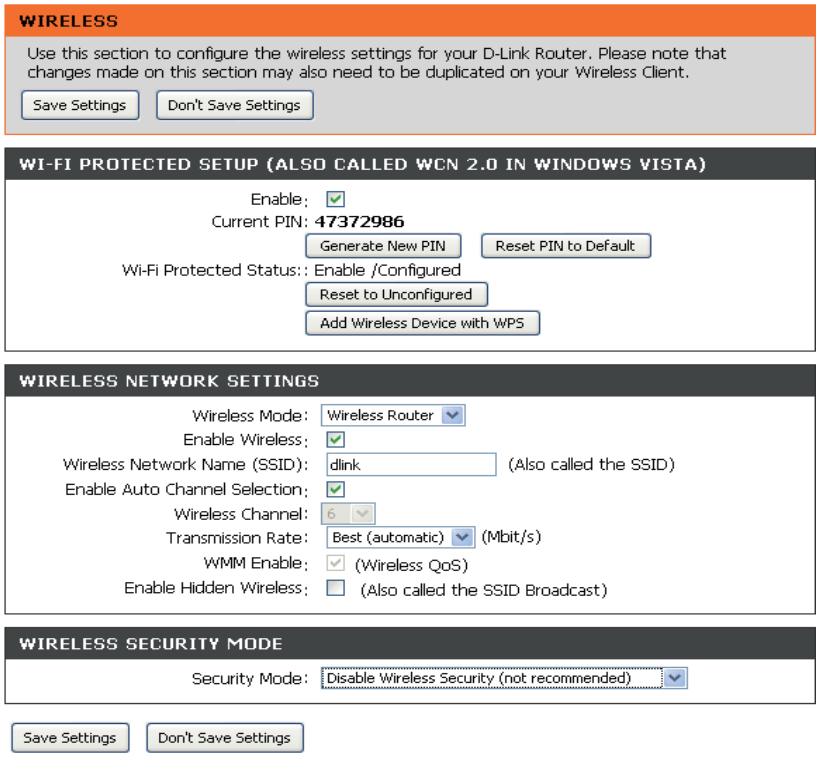
Wi-Fi Protected Setup: To implement Wi-Fi protection, or WCN 2.0, tick the Enable checkbox, click either Generate New PIN or Reset PIN to Default , and then configure the Wi-Fi settings below. Please see the Setting Up Wi-Fi Protection (WCN 2.0 in Windows Vista) section later in this manual for detailed configuration information.

Wireless Mode: Select the wireless mode with which the device is running.

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

Enable Wireless Channel: Indicates the channel setting for the DIR-618. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. The Auto Channel Selection setting can be selected to allow the DIR-618 to choose the channel with the least amount of interference.


WIRELESS
Use this section to configure the wireless settings for your D-Link Router. Please note that changes made on this section may also need to be duplicated on your Wireless Client.
Save Settings
Don't Save Settings
WI-FI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)
Enable:
Current PIN: 47372986
Generate New PIN
Reset PIN to Default
Wi-Fi Protected Status:: Enable /Configured
Reset to Unconfigured
Add Wireless Device with WPS
WIRELESS NETWORK SETTINGS
Wireless Mode: Wireless Router
Enable Wireless:
Wireless Network Name (SSID): dlink (Also called the SSID)
Enable Auto Channel Selection:
Wireless Channel: 6
Transmission Rate: Best (automatic) (Mbit/s)
WMM Enable: (Wireless QoS)
Enable Hidden Wireless: (Also called the SSID Broadcast)
WIRELESS SECURITY MODE
Security Mode: Disable Wireless Security (not recommended)
Save Settings
Don't Save Settings

Transmission Rate: Use the drop-down menu to select the appropriate Transmission Rate in Mbits per second. Many users will want to use the default setting, Best (automatic).

WMM Enable: Enable Wi-Fi Multimedia to enjoy basic quality of service features. WMM prioritizes traffic according to four access categories: voice, video, best effort, and background.

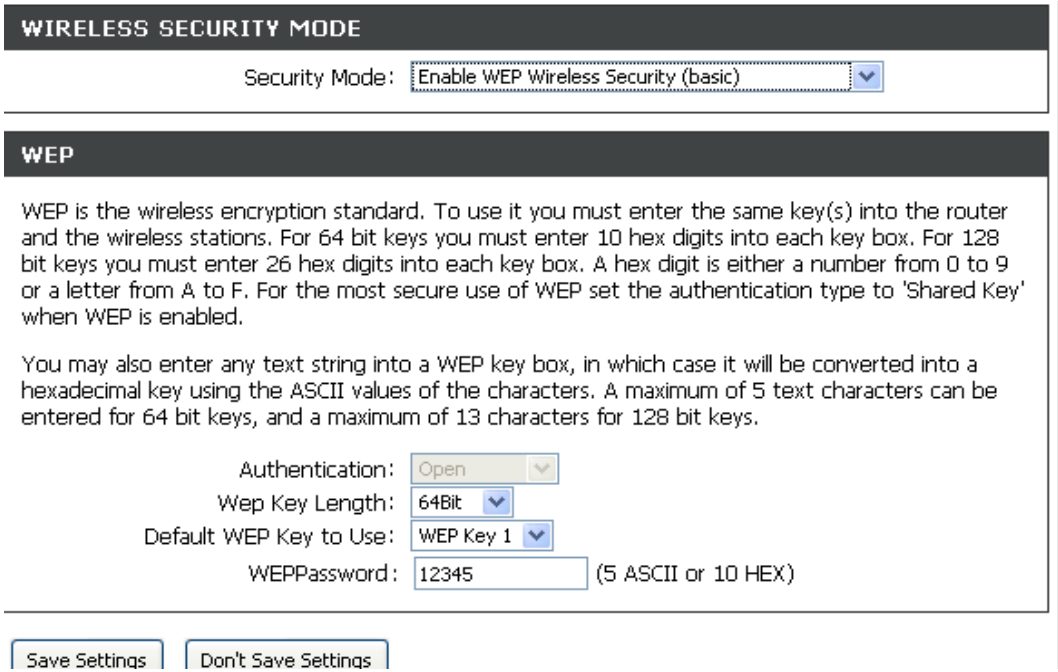
Enable Hidden Wireless: Check this option if you would not like the SSID of your wireless network to be broadcasted by the DIR-618. If this option is checked, the SSID of the DIR-618 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-618 in order to connect to it.

1. To enable wireless security on the Router, use the drop-down menu to select the desired option. To enable WEP, select *Enable WEP Wireless Security (basic)*.

2. Next to **Authentication**, select either *Open* or *Shared Key*. Shared Key provides greater security.

3. Select either *64Bit* or *128Bit* encryption from the drop-down menu next to **WEP Encryption**.

4. Next to **Default Key Type**, select *WEP Key 1* and enter a WEP key that you create. Make sure you enter this key exactly on all your wireless devices. You may enter up to four different keys either using *Hex* or *ASCII*. *Hex* is recommended (letters A-F and numbers 0-9 are valid). In *ASCII* all numbers and letters are valid.
5. Click **Save Settings** to save your settings. If you are configuring the Router with a wireless adapter, you will lose connectivity until you enable WEP on your adapter and enter the same WEP key as you did on the Router.


WIRELESS SECURITY MODE
Security Mode: Enable WEP Wireless Security (basic)
WEP
WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64 bit keys you must enter 10 hex digits into each key box. For 128 bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to 'Shared Key' when WEP is enabled.
You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64 bit keys, and a maximum of 13 characters for 128 bit keys.
Authentication: Open
Wep Key Length: 64Bit
Default WEP Key to Use: WEP Key 1
WEPPassword: 12345 (5 ASCII or 10 HEX)
Save Settings
Don't Save Settings

NOTE:
It is recommended to enable encryption on your wireless Router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

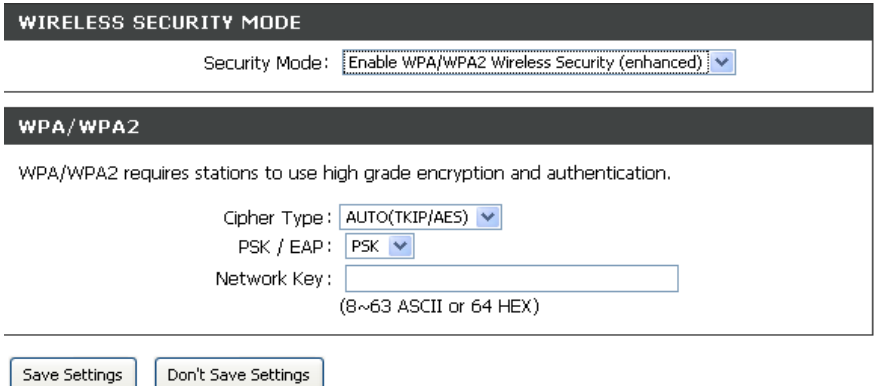
1. To enable *Enable WPA/WPA2 Wireless Security (enhanced).*

2. Next to **Cipher Type**, select *TKIP*, *AES*, or *AUTO*.

3. Next to **PSK/EAP**, select *PSK*.

4. Next to **Network Key**, enter a passphrase. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. Make sure you enter this key exactly the same on all other wireless clients.

5. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA/WPA2 (whichever of the three options you have selected above) on your adapter and enter the same network key as you did on the router.


WIRELESS SECURITY MODE
Security Mode: Enable WPA/WPA2 Wireless Security (enhanced)
WPA/WPA2
WPA/WPA2 requires stations to use high grade encryption and authentication.
Cipher Type: AUTO(TKIP/AES)
PSK / EAP: PSK
Network Key:
(8~63 ASCII or 64 HEX)
Save Settings
Don't Save Settings

1. To enable WPA/WPA2 for a RADIUS server, next to **Security Mode**, selec or *Enable WPA/WPA2 Wireless Security (enhanced)*.

2. Next to **Cipher Type**, select *TKIP*, *AES*, or *Auto*.

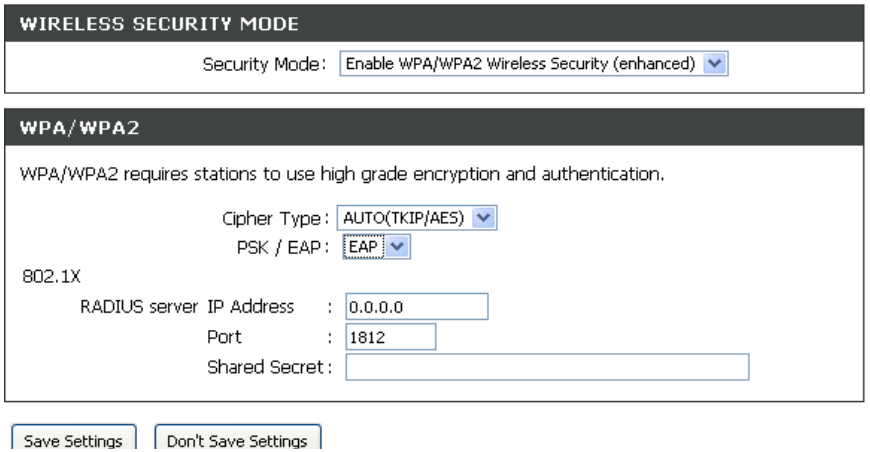
3. Next to **PSK/EAP**, select *EAP*.

4. Next to **RADIUS Server** enter the **IP Address** of your RADIUS server.

5. Next to **Port**, enter the port you are using with your RADIUS server. *1812* is the default port.

6. Next to **Shared Secret**, enter the security key.

8. Click **Save Settings** to save your settings.



LAN Setup

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

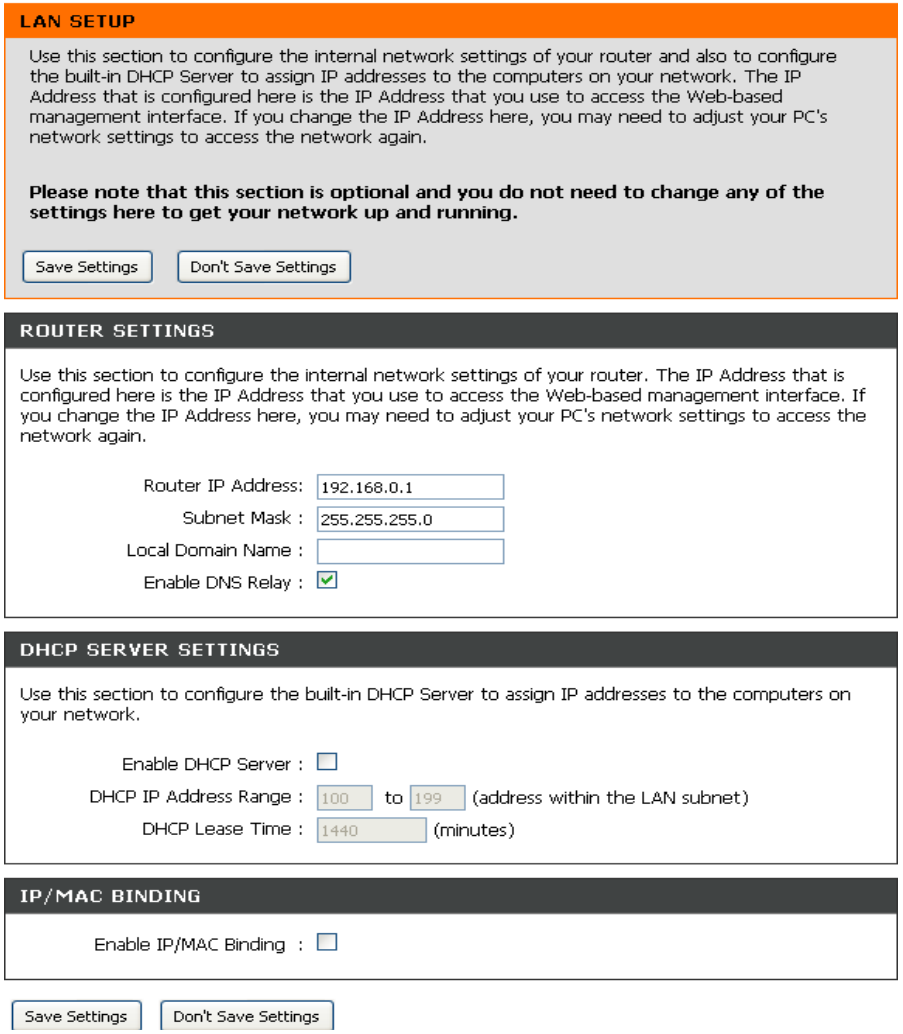
If you change the IP address, once you click **Apply**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Subnet Mask: Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

Local Domain Name: Enter the Domain name (Optional).

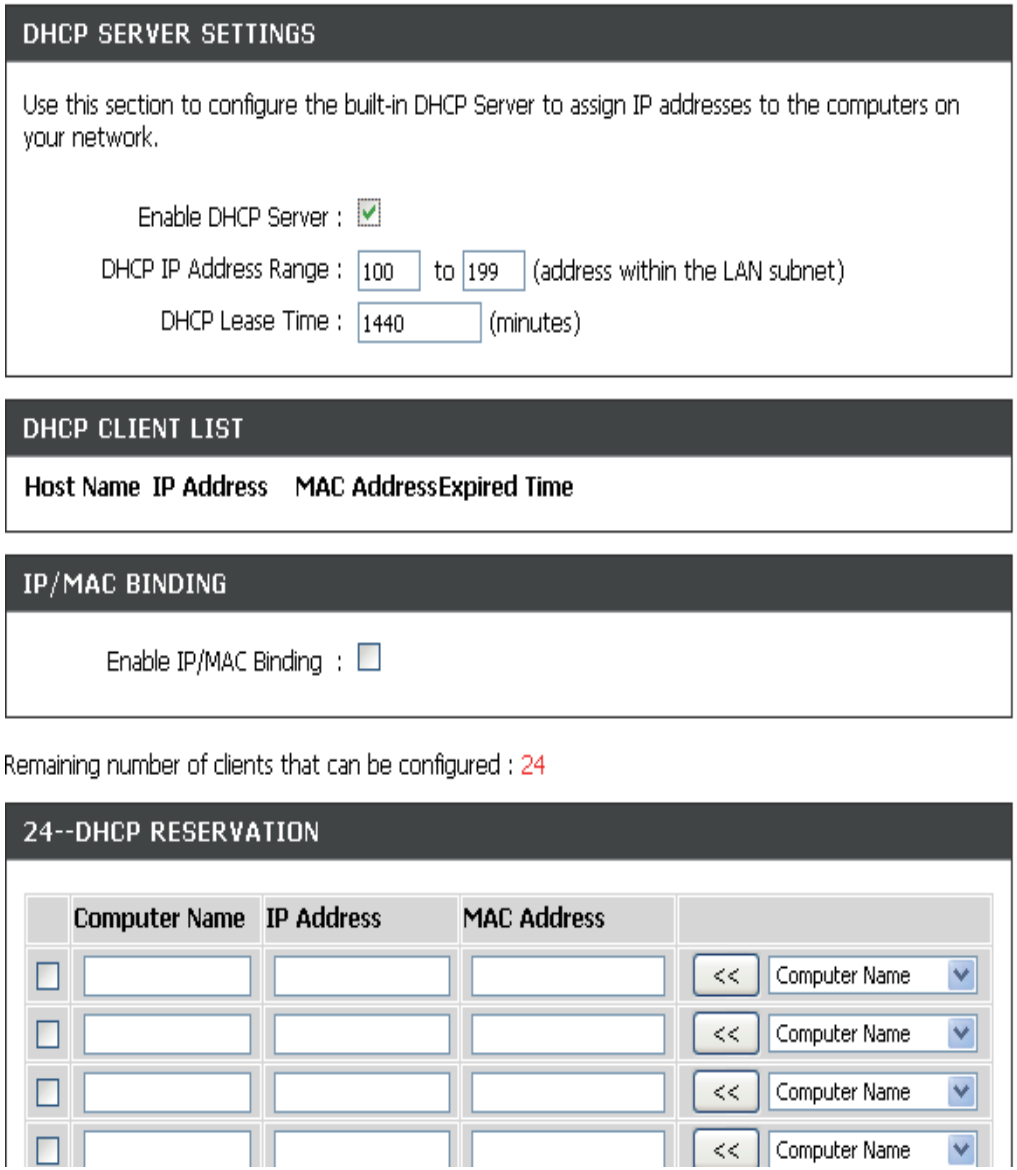
Enable DNS Relay: Check the box to transfer the DNS server information from your ISP to your computers. If unchecked, your computers will use the router for a DNS server.

Refer to the next page for DHCP information.


LAN SETUP
Use this section to configure the internal network settings of your router and also to configure the built-in DHCP Server to assign IP addresses to the computers on your network. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.
Please note that this section is optional and you do not need to change any of the settings here to get your network up and running.
Save Settings
Don't Save Settings
ROUTER SETTINGS
Use this section to configure the internal network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.
Router IP Address: 192.168.0.1
Subnet Mask : 255.255.255.0
Local Domain Name :
Enable DNS Relay :
DHCP SERVER SETTINGS
Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.
Enable DHCP Server :
DHCP IP Address Range : 100 to 199 (address within the LAN subnet)
DHCP Lease Time : 1440 (minutes)
IP/MAC BINDING
Enable IP/MAC Binding :
Save Settings
Don't Save Settings

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-618 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to “Obtain an IP Address Automatically.” When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-618. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.


DHCP SERVER SETTINGS
Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.
Enable DHCP Server :
DHCP IP Address Range : 100 to 199 (address within the LAN subnet)
DHCP Lease Time : 1440 (minutes)
DHCP CLIENT LIST
Host Name IP Address MAC AddressExpired Time
IP/MAC BINDING
Enable IP/MAC Binding :
Remaining number of clients that can be configured : 24
24--DHCP RESERVATION
Computer Name
IP Address
MAC Address
<<
Computer Name

Enable DHCP Server: Check the box to enable the DHCP server on your router. Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server’s IP assignment.

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Enable IP/ MAC Binding: Enable this function to protect the computer in DHCP Reservation pool from ARP attack.

Time and Date

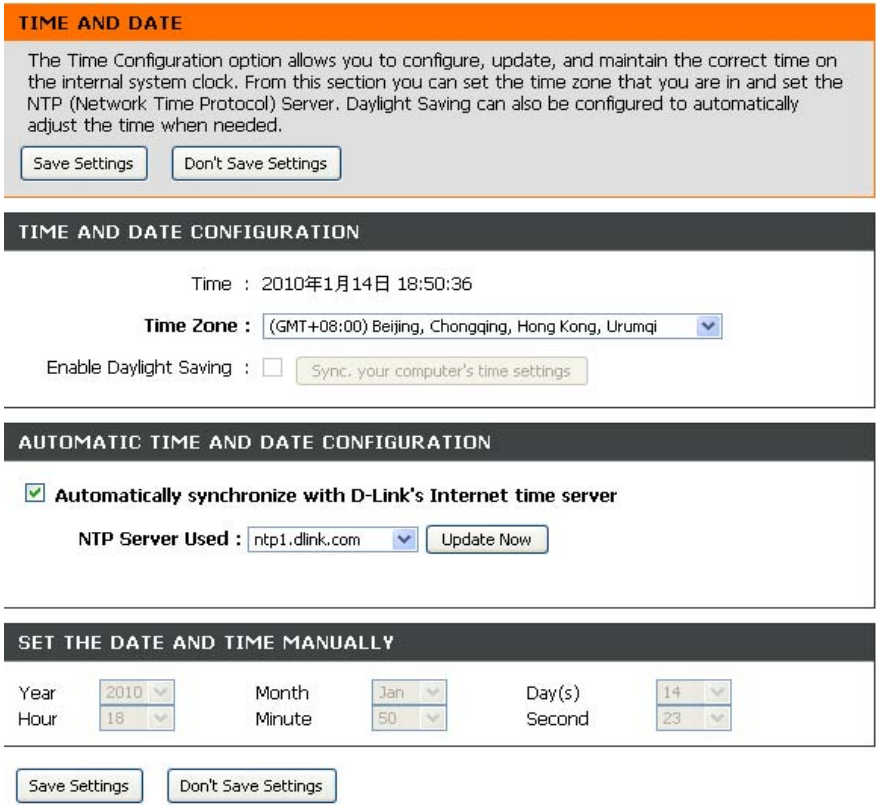
This section will allow you to configure, update, and maintain the correct time on the internal system clock.

Time Zone: Select the Time Zone from the drop-down menu.

Enable Daylight Saving: Ticking this checkbox enables Daylight Saving time. Click **Sync. your computer's time settings** to copy your PC's time settings.

NTP Server Used: Tick the "Automatically synchronize with D-Link's Internet time server" checkbox and then use the drop-down menu to select an NTP Server. NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers.

Manual: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second. Click **Save Settings**.


TIME AND DATE
The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.
Save Settings
Don't Save Settings
TIME AND DATE CONFIGURATION
Time : 2010年1月14日 18:50:36
Time Zone : (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
Enable Daylight Saving :
Sync. your computer's time settings
AUTOMATIC TIME AND DATE CONFIGURATION
Automatically synchronize with D-Link's Internet time server
NTP Server Used : ntp1.dlink.com
Update Now
SET THE DATE AND TIME MANUALLY
Year 2010
Month Jan
Day(s) 14
Hour 18
Minute 50
Second 23
Save Settings
Don't Save Settings

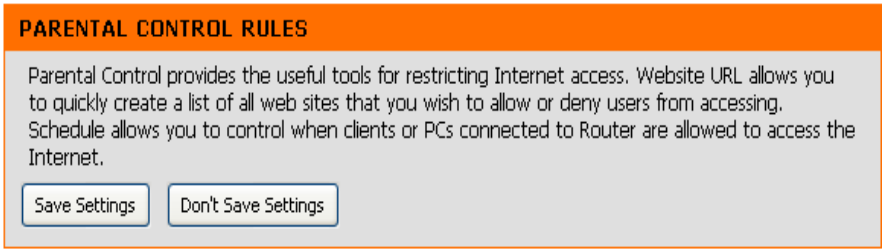
Parental Control

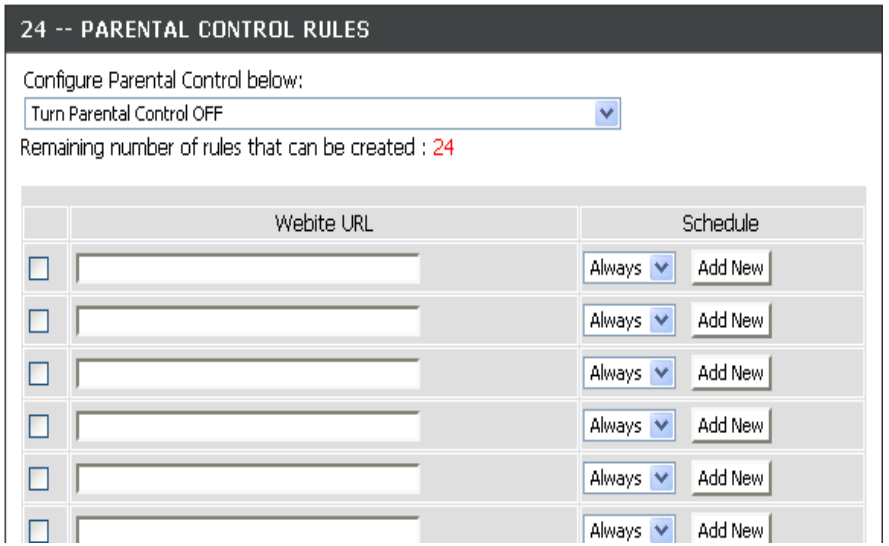
This feature allows you to create a list of websites that you want to either allow or deny users access.

Configure Parental Control: Select *Turn Parental Control OFF*, *Turn Parental Control ON and ALLOW computers access to ONLY these sites*, or *Turn Parental Control ON and DENY computers access to ONLY these sites*.

Website URL: Enter the keywords or URLs that you want to block (or allow). Any URL with the keyword in it will be blocked.

Schedule: The schedule of time when the parental control filter will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Maintenance** > **Schedules** section.


PARENTAL CONTROL RULES
Parental Control provides the useful tools for restricting Internet access. Website URL allows you to quickly create a list of all web sites that you wish to allow or deny users from accessing. Schedule allows you to control when clients or PCs connected to Router are allowed to access the Internet.
Save Settings
Don't Save Settings



Port Forwarding

This will allow you to open a single port or a range of ports.

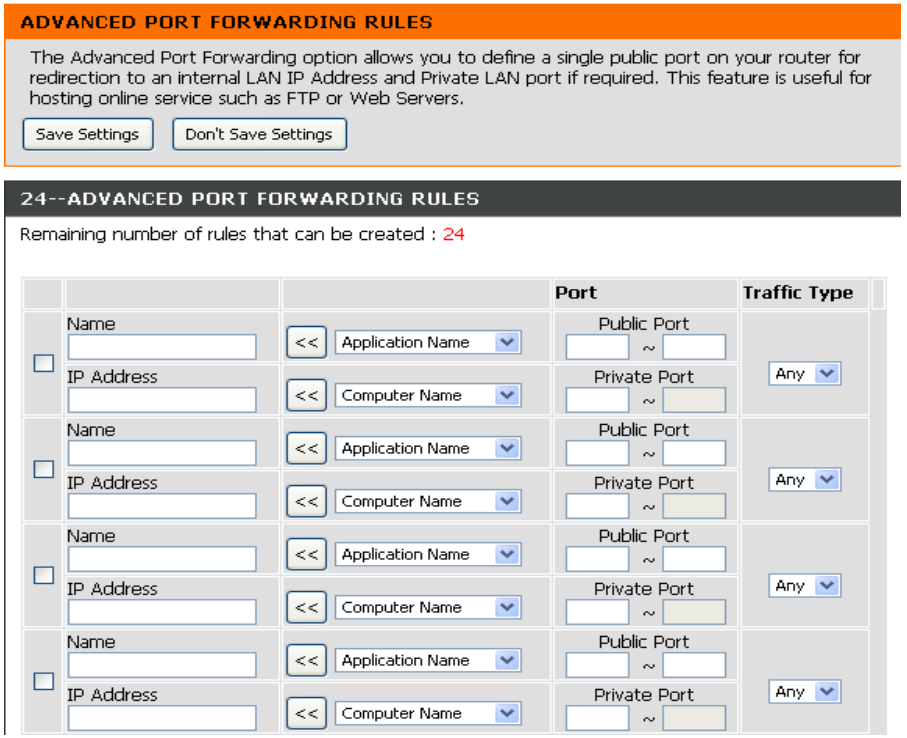
Rule: Check the box to enabled the rule.

Name: Enter a name for the rule.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to.

Start Port/ End Port: Enter the port or ports that you want to open. If you want to open one port, enter the same port in both boxes.

Traffic Type: Select *TCP*, *UDP*, or *Any*


ADVANCED PORT FORWARDING RULES
The Advanced Port Forwarding option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online service such as FTP or Web Servers.
Save Settings
Don't Save Settings
24--ADVANCED PORT FORWARDING RULES
Remaining number of rules that can be created : 24
Port
Traffic Type
Name
Application Name
Public Port
IP Address
Computer Name
Private Port
Any

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-618.

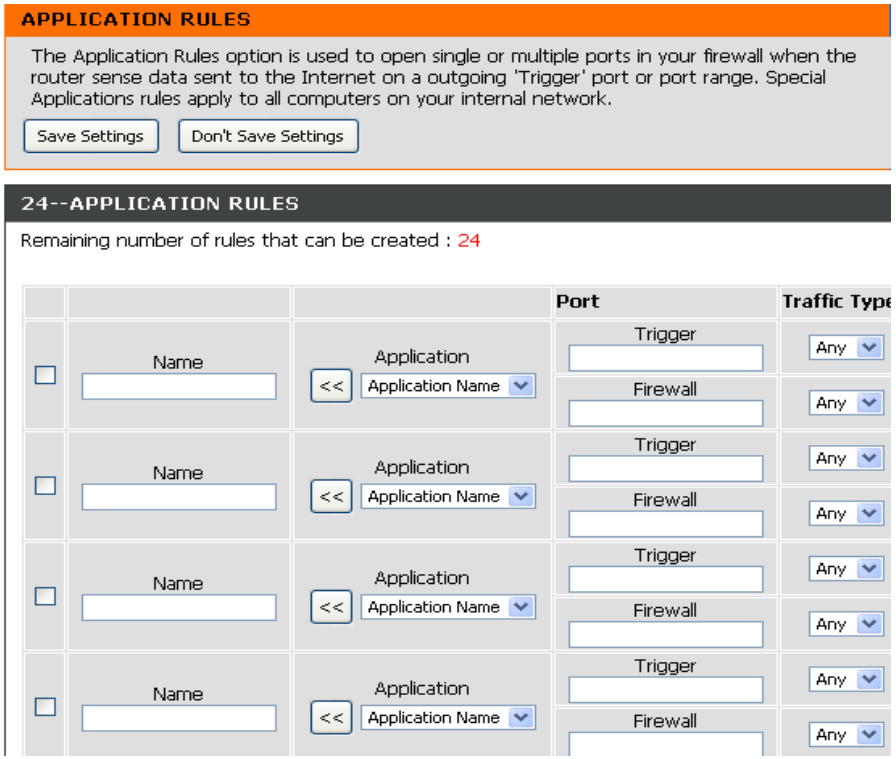
Rule: Check the box to enable the rule.

Name: Enter a name for the rule.

Trigger Port: This is the port used to trigger the application. It can be either a single port or a range of ports.

Firewall Port: This is the port number on the WAN side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select *TCP*, *UDP*, or *Any*.


APPLICATION RULES
The Application Rules option is used to open single or multiple ports in your firewall when the router sense data sent to the Internet on a outgoing 'Trigger' port or port range. Special Applications rules apply to all computers on your internal network.
Save Settings
Don't Save Settings
24--APPLICATION RULES
Remaining number of rules that can be created : 24
Port
Traffic Type
Name
Application
<<
Application Name
Trigger
Firewall
Any

MAC Filter

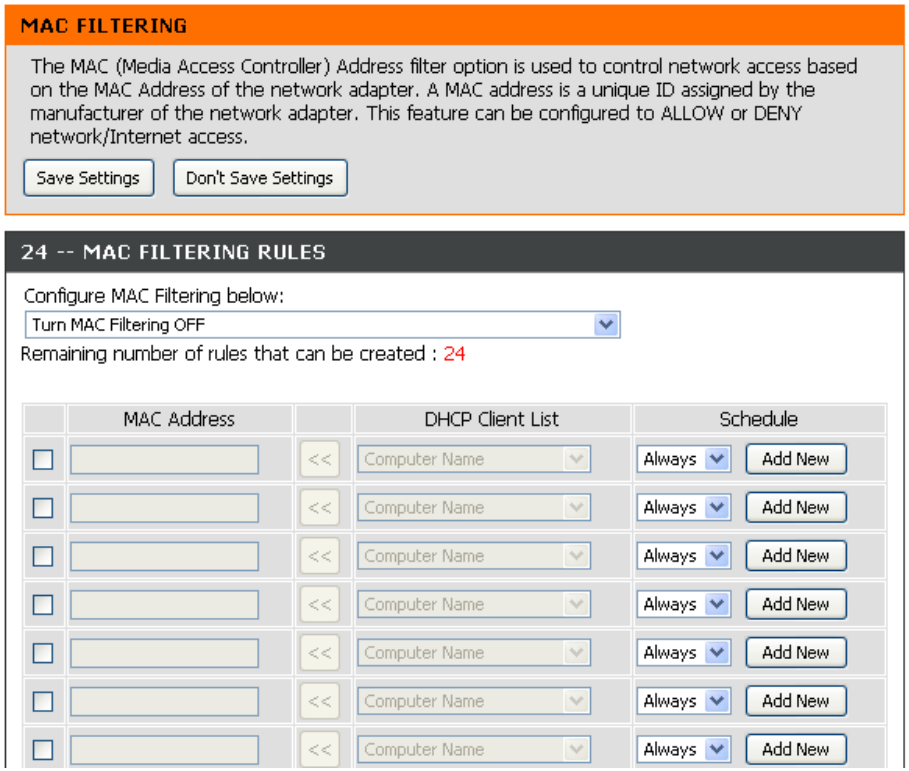
Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the Network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

Configure MAC Filter: Select *Turn MAC Filtering OFF*, *Turn MAC Filtering ON and ALLOW computers listed to access the network*, or *Turn MAC Filtering ON and DENY computers listed to access the network*.

MAC Address: Enter the MAC address you would like to filter. To find the MAC address on a computer, please refer to the Networking Basics section in this manual.

DHCP Client List: Select a DHCP client from the drop-down menu and click the arrow to copy that MAC Address.

Schedule: The schedule of time when the network filter will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Maintenance** > **Schedules** section.


MAC FILTERING
The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.
Save Settings
Don't Save Settings
24 -- MAC FILTERING RULES
Configure MAC Filtering below:
Turn MAC Filtering OFF
Remaining number of rules that can be created : 24
MAC Address
DHCP Client List
Schedule
<<
Computer Name
Always
Add New

Traffic control

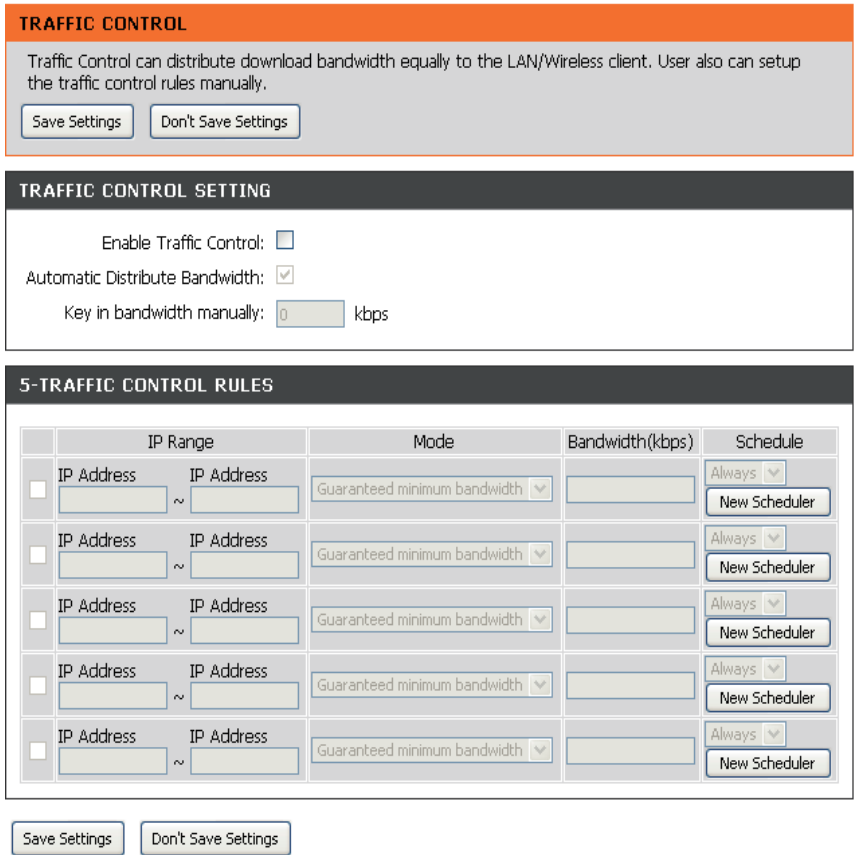
Traffic control can be used to distribute download bandwidth automatically according to the requirements of the users, and the users also can setup manually.

Enable Traffic Control: Select this function to control the access bandwidth of computer in LAN.

Automatic Distribute Bandwidth: All the computers in LAN will be distributed the bandwidth equally.

key in bandwidth manually: Key in the value to setup the bandwidth manually.

Taffic Control Rules: When the option Automatic Distribute Bandwidth is unchecked, you can control the access bandwidth of the specific IP address.



Firewall & DMZ

This section will allow you to set up a DMZ host and to set up firewall rules.

If you have a client PC that cannot run Internet applications properly from behind the DIR-618, then you can set the client up for unrestricted Internet access. It allows a computer to be exposed to the Internet. This feature is useful for gaming purposes. Enter the IP address of the internal computer that will be the DMZ host. Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks, so only use this option as a last resort.

Enable SPI andAnti-Spoof: Check this to enable SPI and Anti-Spoof.

Enable DMZ Host: Check this box to enable DMZ.

DMZ IP Address: Enter the IP address of the computer you would like to open all ports to.

Name: Choose a name for the firewall rule.

Action: Select to Allow or Deny transport of the data packets according to the criteria defined in the rule.

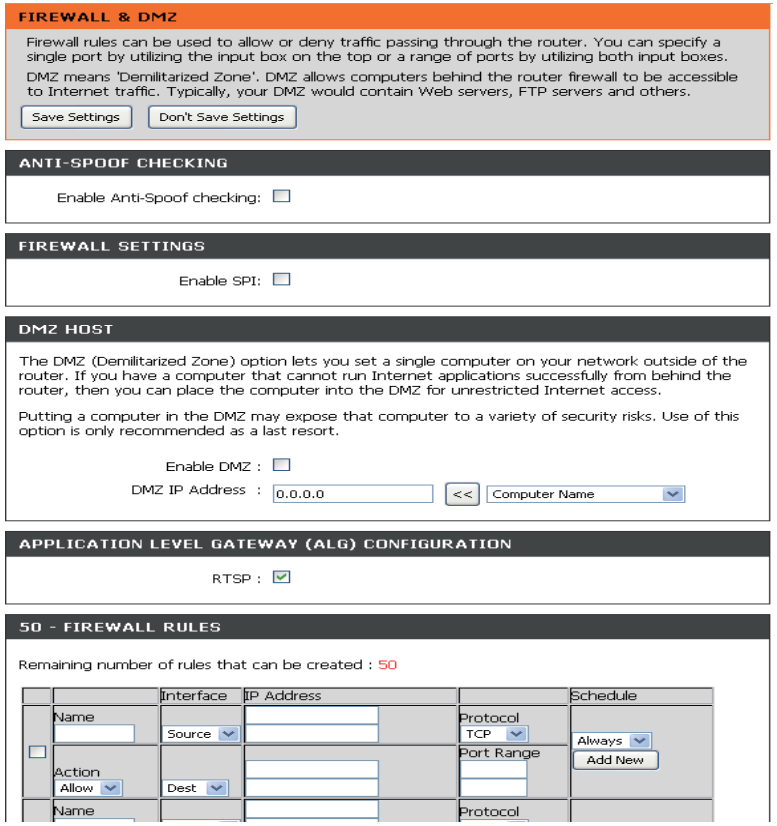
Source/Dest: The Source/Destination is the TCP/UDP port on either the LAN or WAN side.

Schedule: Click New Schedule to access the Schedules window. See Maintenance>Schedules for more information.

IP Address: Enter a beginning and ending IP address.

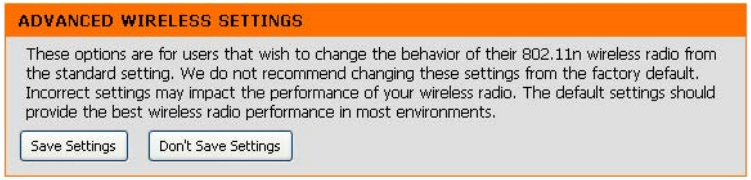
Protocol: Select the transport protocol that will be used for the filter rule.

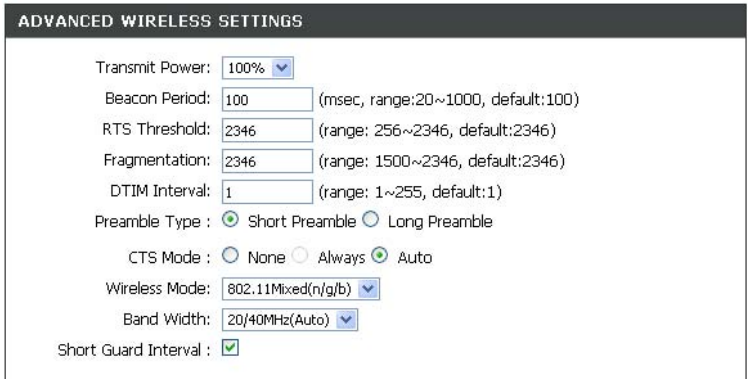
Port Range: Enter the desired port range for the filter rule.


FIREWALL & DMZ
Firewall rules can be used to allow or deny traffic passing through the router. You can specify a single port by utilizing the input box on the top or a range of ports by utilizing both input boxes.
DMZ means 'Demilitarized Zone'. DMZ allows computers behind the router firewall to be accessible to Internet traffic. Typically, your DMZ would contain Web servers, FTP servers and others.
Save Settings
Don't Save Settings
ANTI-SPOOF CHECKING
Enable Anti-Spoof checking:
FIREWALL SETTINGS
Enable SPI:
DMZ HOST
The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.
Putting a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.
Enable DMZ :
DMZ IP Address :
0.0.0.0
<<
Computer Name
APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION
RTSP :
50 - FIREWALL RULES
Remaining number of rules that can be created : 50
Interface
IP Address
Schedule
Name
Source
Protocol
TCP
Always
Add New
Action
Allow
Dest
Port Range
Name
Protocol

Advanced Wireless

This window allows you to change the behavior of the 802.11g wireless radio from the standard settings. Please be aware that any changes to the factory default settings may adversely affect the behavior of your network.


ADVANCED WIRELESS SETTINGS
These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard setting. We do not recommend changing these settings from the factory default. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.
Save Settings
Don't Save Settings


ADVANCED WIRELESS SETTINGS
Transmit Power: 100%
Beacon Period: 100 (msec, range:20~1000, default:100)
RTS Threshold: 2346 (range: 256~2346, default:2346)
Fragmentation: 2346 (range: 1500~2346, default:2346)
DTIM Interval: 1 (range: 1~255, default:1)
Preamble Type : Short Preamble Long Preamble
CTS Mode : None Always Auto
Wireless Mode: 802.11Mixed(n/g/b)
Band Width: 20/40MHz(Auto)
Short Guard Interval :

Transmit Power: Set the transmit power of the antennas.

Beacon interval: Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a value. *100* is the default setting and is recommended.

RTS Threshold: This value should remain at its default setting of *2346*. If inconsistent data flow is a problem, only a minor modification should be made.

Fragmentation: The fragmentation threshold, which is specified in bytes, determines whether packets will be fragmented. Packets exceeding the 2346 byte setting will be fragmented before transmission. *2346* is the default setting.

DTIM Interval: (Delivery Traffic Indication Message) *1* is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

Preamble Type: Select Short or Long Preamble. The Preamble defines the length of the CRC block (Cyclic Redundancy Check is a common technique for detecting data transmission errors) for communication between the wireless router and the roaming wireless network adapters. Auto is the default setting. Note: High network traffic areas should use the shorter preamble type.

CTS Mode: CTS (Clear To Send) is a function used to minimize collisions among wireless devices on a wireless local area network (LAN). CTS will make sure the wireless network is clear before a wireless client attempts to send wireless data. Enabling CTS will add overhead and may lower wireless through put. **None:** CTS is typically used in a pure 802.11g environment. If CTS is set to “None” in a mixed mode environment populated by 802.11b clients, wireless collisions may occur frequently. **Always:** CTS will always be used to make sure the wireless LAN is clear before sending data. **Auto:** CTS will monitor the wireless network and automatically decide whether to implement CTS based on the amount of traffic and collisions that occurs on the wireless network.

Wireless Mode: 802.11n Only - Select only if all of your wireless clients are 802.11n.
Mixed 802.11n, 802.11b, and 802.11g - Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Auto 20/40: Select if you are using both 802.11n and non-802.11n wireless devices.

20MHz: Select if you are not using any 802.11n wireless clients. This is the default setting.

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, it’s less reliable and may create higher data loss.

Advanced Network

This window allows you to change the LAN settings. Please be aware that any changes to the factory default settings may affect the behavior of your network.

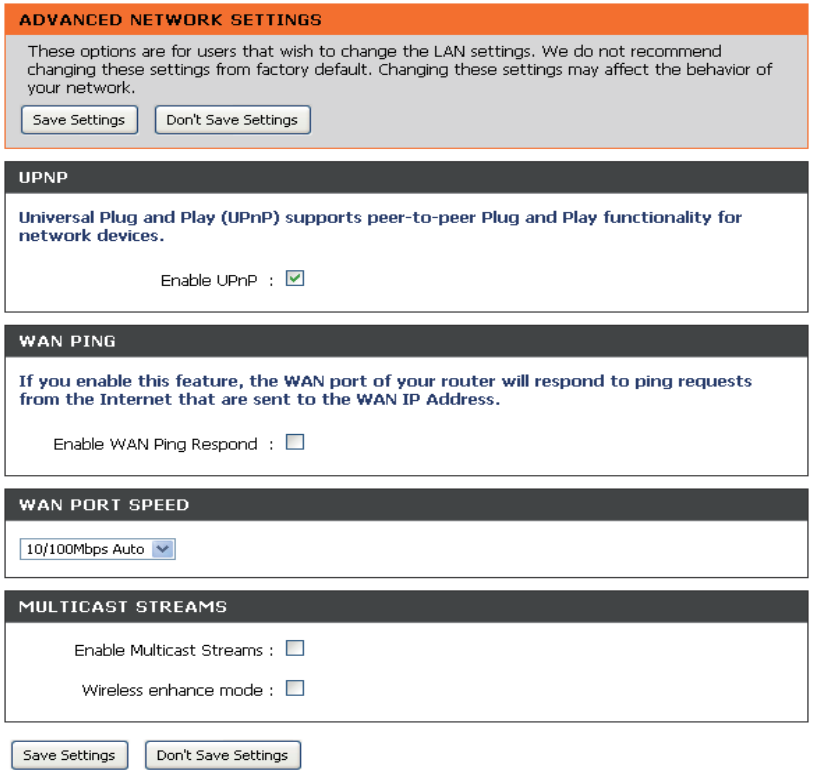
Enable UPnP: To use the Universal Plug and Play (UPnP™) feature tick this checkbox. UPNP provides compatibility with networking equipment, software and peripherals.

Enable WAN Ping Respond: Unchecking the box will not allow the DIR-618 to respond to Pings. Blocking the Ping may provide some extra security from hackers. Tick this checkbox to allow the WAN port to be “Pinged”.

WAN Port Speed: You may set the port speed of the WAN port to 10Mbps, 100Mbps, or 10/100Mbps Auto. Some older cable or DSL modems may require you to set the port speed to 10Mbps.

Enable Multicast streams: Tick this checkbox to enable this function.

Wireless enhance mode: Tick this checkbox to enable this function.


ADVANCED NETWORK SETTINGS
These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network.
Save Settings
Don't Save Settings
UPNP
Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.
Enable UPnP :
WAN PING
If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address.
Enable WAN Ping Respond :
WAN PORT SPEED
10/100Mbps Auto
MULTICAST STREAMS
Enable Multicast Streams :
Wireless enhance mode :
Save Settings
Don't Save Settings

Routing

This option allows you to define fixed routes to defined destinations.

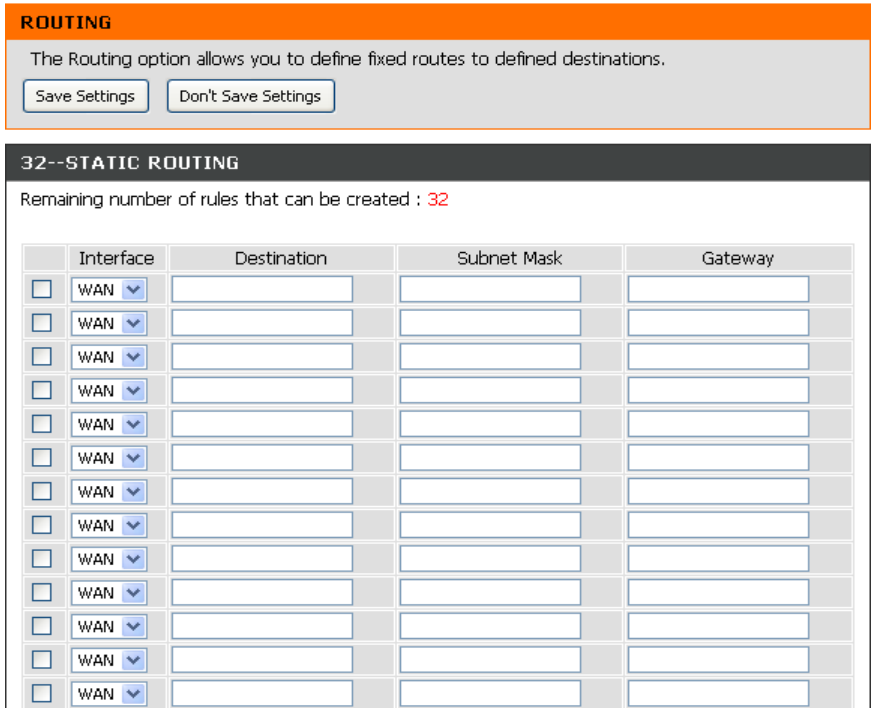
Enable: Tick this checkbox to enable or disable fixed routes to defined destinations.

Interface: Use the drop-down menu to choose the *WAN or WAN (Physical Port)* Interface the IP packet must use to transit out of the Router.

Destination: The IP address of the packets that will take this route.

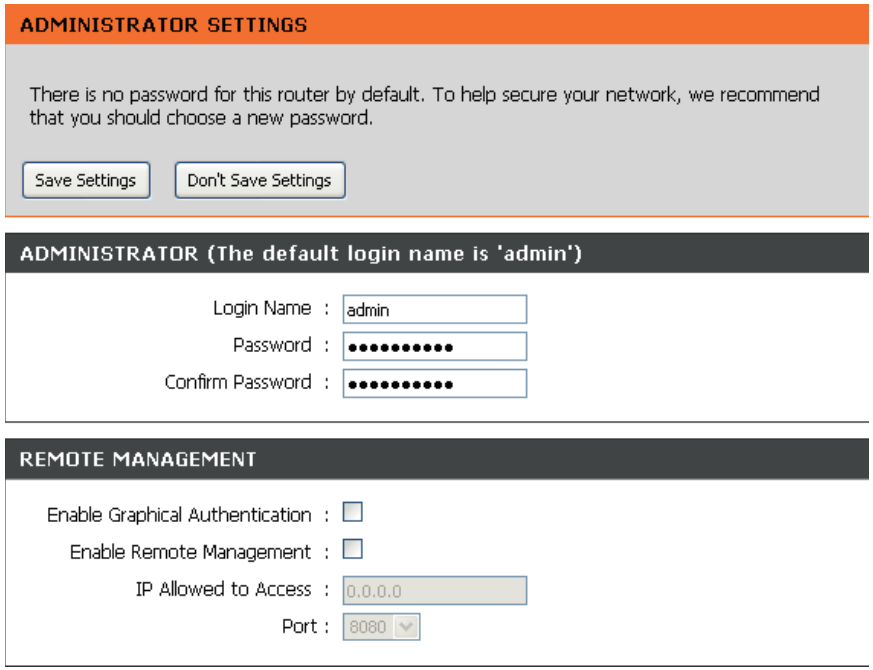
Subnet Mask: The subnet of the IP address of the packets that will take this route.

Gateway: Specifies the next hop to be taken if this route is used.



Device Administration

This window will allow you to change the Administrator password. You can also enable Remote Management.


ADMINISTRATOR SETTINGS
There is no password for this router by default. To help secure your network, we recommend that you should choose a new password.
Save Settings
Don't Save Settings
ADMINISTRATOR (The default login name is 'admin')
Login Name :
admin
Password :
Confirm Password :
REMOTE MANAGEMENT
Enable Graphical Authentication :
Enable Remote Management :
IP Allowed to Access :
0.0.0.0
Port :
8080

Login Name: Enter a new Login Name for the Administrator account.

Password: Enter a new password for the Administrator Login Name and then retype the new password in the Confirm Password textbox. The administrator can make changes to the settings.

Enale Graphical Authentication: Need to enter the Graphical Authentication generated by the system when log in.

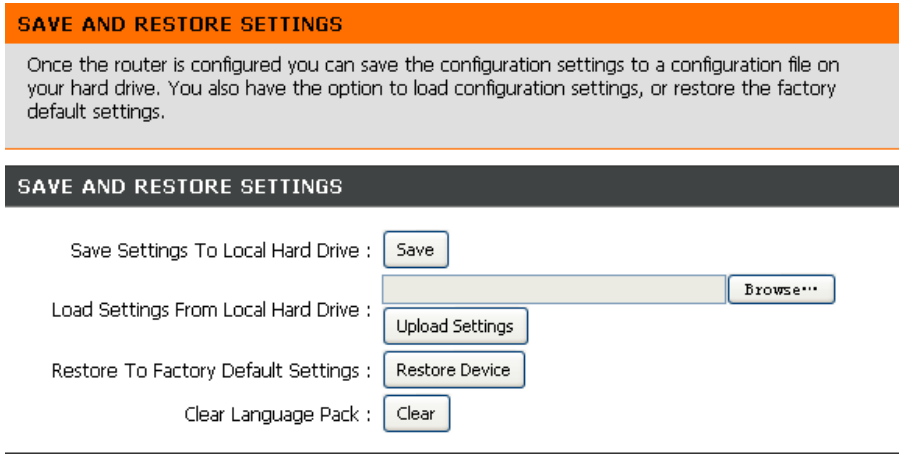
Enable Remote Management: Remote management allows the DIR-618 to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform Administrator tasks. This feature enables you to perform Administrator tasks from the remote (Internet) host.

IP Allowed to Access: The Internet IP address of the computer that has access to the Broadband Router. If you input an asterisk (*) into this field, then any computer will be able to access the Router. Putting an asterisk (*) into this field would present a security risk and is not recommended.

Port: The port number used to access the DIR-618. For example: http://x.x.x.x:8080 whereas x.x.x.x is the WAN IP address of the DIR-618 and 8080 is the port used for the Web-Management interface.

Save and Restore

This window allows you to save your configuration file to a hard drive, load configuration settings from a hard drive, and restore the Router's factory default settings.


SAVE AND RESTORE SETTINGS
Once the router is configured you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.
SAVE AND RESTORE SETTINGS
Save Settings To Local Hard Drive :
Save
Load Settings From Local Hard Drive :
Browse...
Upload Settings
Restore To Factory Default Settings :
Restore Device
Clear Language Pack :
Clear

Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the **Browse** control to find a previously save file of configuration settings. Then, click the **Upload Settings** button to transfer those settings to the Router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

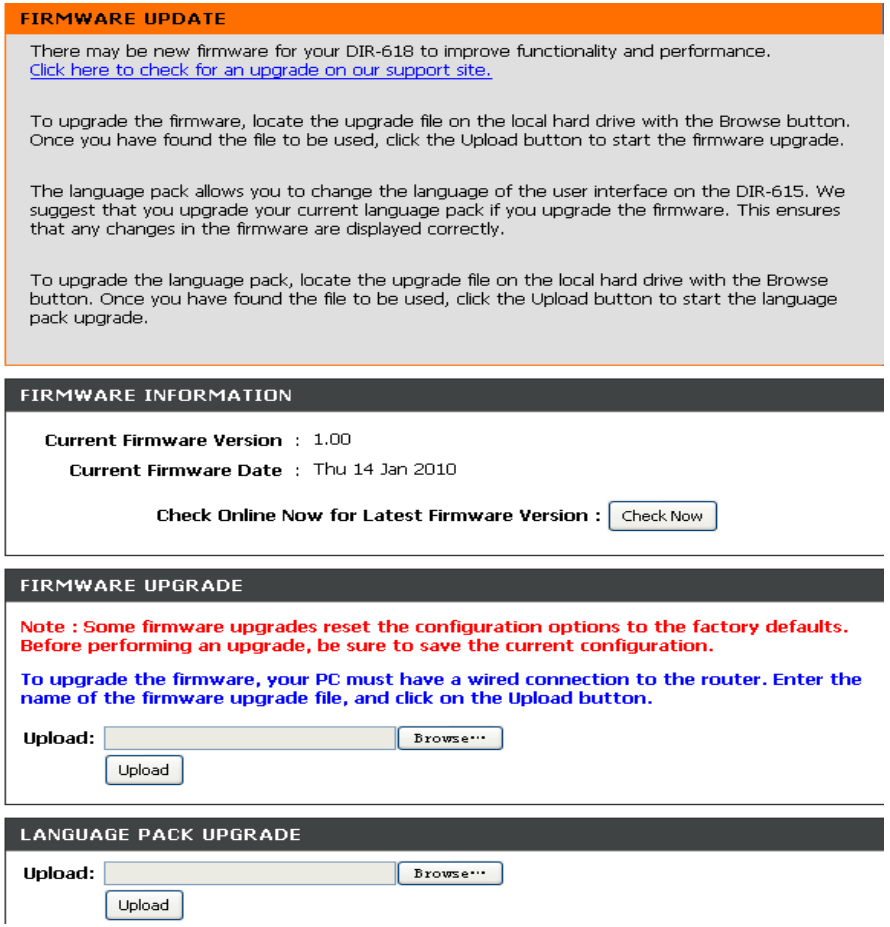
Clear Language Pack: Click the **Clear** button to clear the language pack.

Firmware Update

You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at http://support.dlink.com. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware Upgrade: Click the **Check Now** button (or the link at the top of the window) to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

Language Pack Upgrade: After you have downloaded the new language pack, click **Browse** in this window to locate the pack on your hard drive. Click **Upload** to complete the upgrade.


FIRMWARE UPDATE
There may be new firmware for your DIR-618 to improve functionality and performance.
Click here to check for an upgrade on our support site.
To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.
The language pack allows you to change the language of the user interface on the DIR-615. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.
To upgrade the language pack, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.
FIRMWARE INFORMATION
Current Firmware Version : 1.00
Current Firmware Date : Thu 14 Jan 2010
Check Online Now for Latest Firmware Version : Check Now
FIRMWARE UPGRADE
Note : Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.
To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.
Upload: Browse...
Upload
LANGUAGE PACK UPGRADE
Upload: Browse...
Upload

DDNS Setting

The router supports DDNS (Dynamic Domain Name Service). The Dynamic DNS service allows a dynamic public IP address to be associated with a static host name in any of the many domains, allowing access to a specified host from various locations on the Internet. This is enabled to allow remote access to a host by clicking a hyperlinked URL in the form “hostname.dyndns.org”. Many ISPs assign public IP addresses using DHCP, this can make it difficult to locate a specific host on the LAN using standard DNS. If for example you are running a public web server or VPN server on your LAN, this ensures that the host can be located from the Internet if the public IP address changes. DDNS requires that an account be setup with one of the supported DDNS providers.

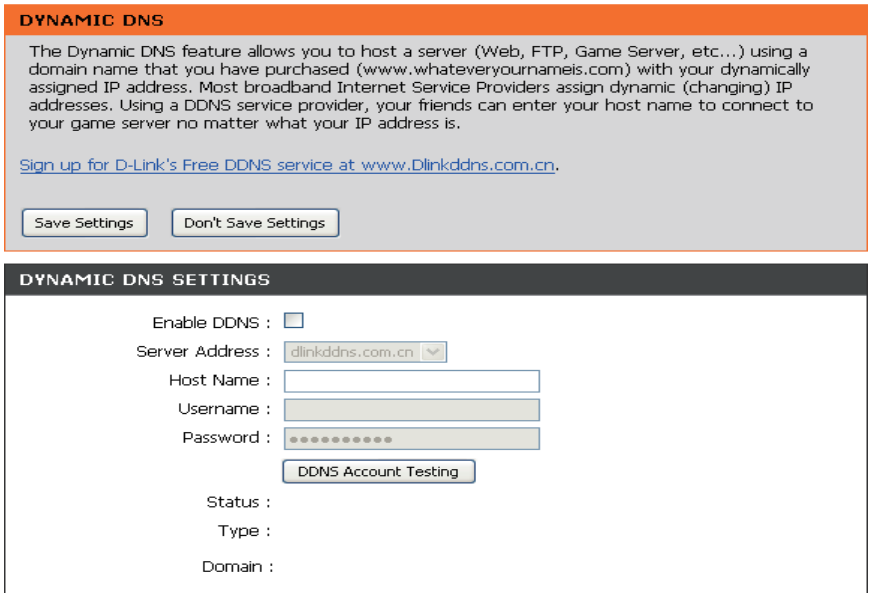
Enable DDNS: Tick the Enable DDNS checkbox to enable support for DDNS.

Server Address: Select one of the DDNS registration organizations form those listed in the pull-down menu.

Host Name: Enter the host name of the DDNS server.

Username: Enter the username given to you by your DDNS server.

Password: Enter the password or key given to you by your DDNS server.

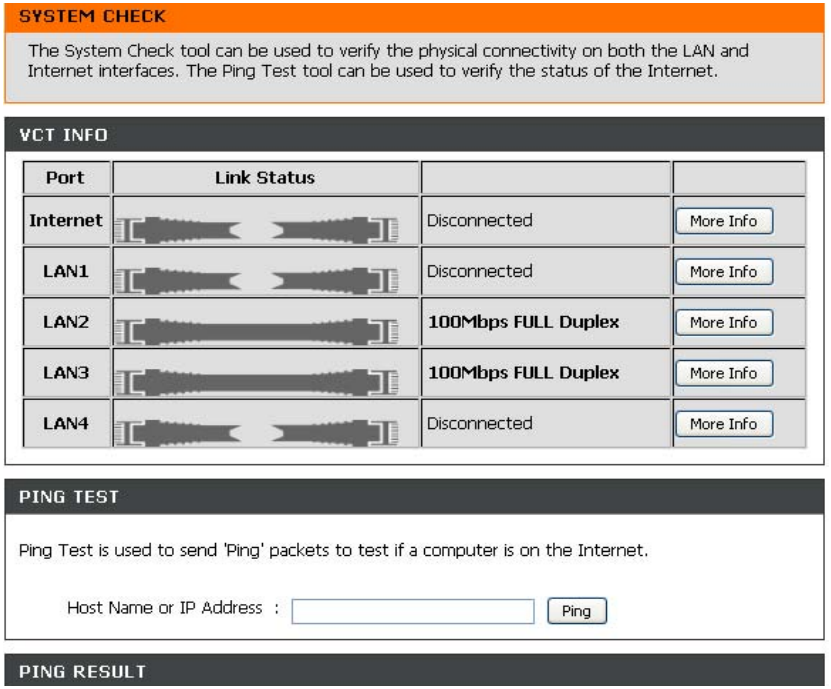

DYNAMIC DNS
The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.
Sign up for D-Link's Free DDNS service at www.Dlinkddns.com.cn.
Save Settings
Don't Save Settings
DYNAMIC DNS SETTINGS
Enable DDNS :
Server Address :
dlinkddns.com.cn
Host Name :
Username :
Password :
DDNS Account Testing
Status :
Type :
Domain :

System Check

This tool is used to verify the physical connectivity on both the LAN and the WAN interfaces. The Ping Test can be used to test the status of the Internet.

Virtual Cable Tester (VCT) Info: VCT is an advanced feature that integrates a LAN cable tester on every Ethernet port on the router. Through the graphical user interface (GUI), VCT can be used to remotely diagnose and report cable faults such as opens, shorts, swaps, and impedance mismatch. This feature significantly reduces service calls and returns by allowing users to easily troubleshoot their cable connections.

Ping Test: The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to Ping, and click **Ping**.



Schedules

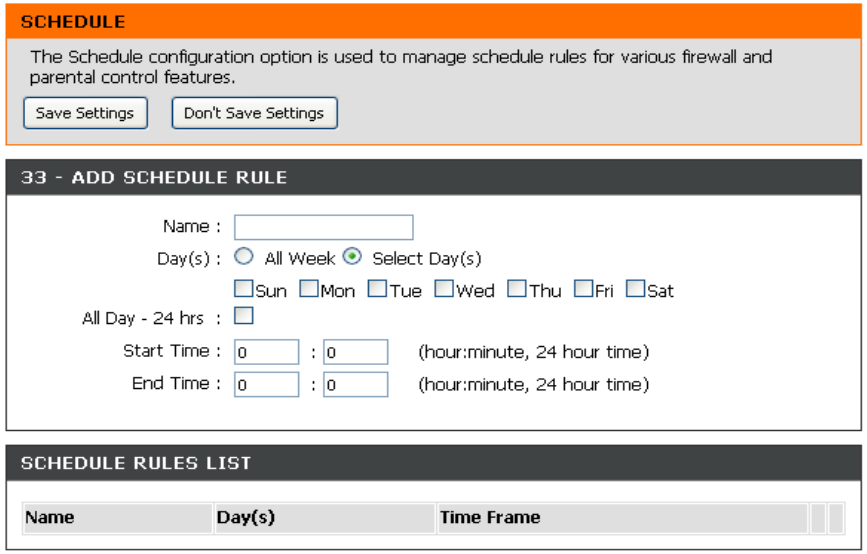
The Router allows the user the ability to manage schedule rules for various firewall and parental control features on this window. Once you have finished configuring the new schedule rule, click the **Save Settings** button at the top of the window.

Name: Enter a name for the new schedule rule.

Day(s): Choose the desired day(s), either All Week or Select Days. If the latter is selected, please use the checkboxes directly below to specify the individual days.

All Day - 24 hrs: Tick this check box if the new schedule rule applies to the full 24-hour period.

Start Time/ End Time: If the new schedule rule does not apply to the full 24-hour period, untick the previous checkbox and then enter a specific beginning and ending time.



Log Settings

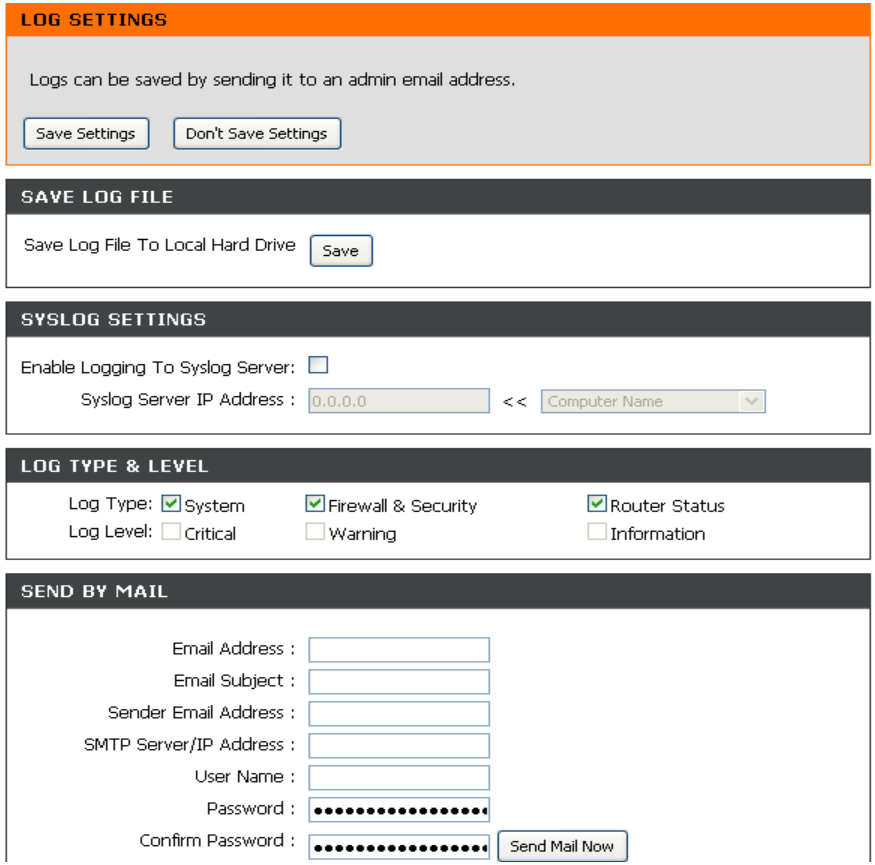
The system log displays chronological event log data specified by the router user. You may also save a simple text file containing the log to your computer. Click the **Save** button and follow the prompts to save the file.

Save Log File: Click on the **Save** button link on this window to save the log file to your local hard drive.

Syslog Server: click the checkbox to save the log in the log server in the LAN side.

Log Type & Level: Click the checkbox(es) of the type of log information requested: **"System, Firewall & Security, Router Status, Critical, Warning and Information"**

Send by Mail: Enter the your SNTP server name(or IP address) and enter your mail address before sending your system log by mail.



Device Info

This window displays the current information for the DIR-618. It will display the LAN, WAN, and Wireless information.

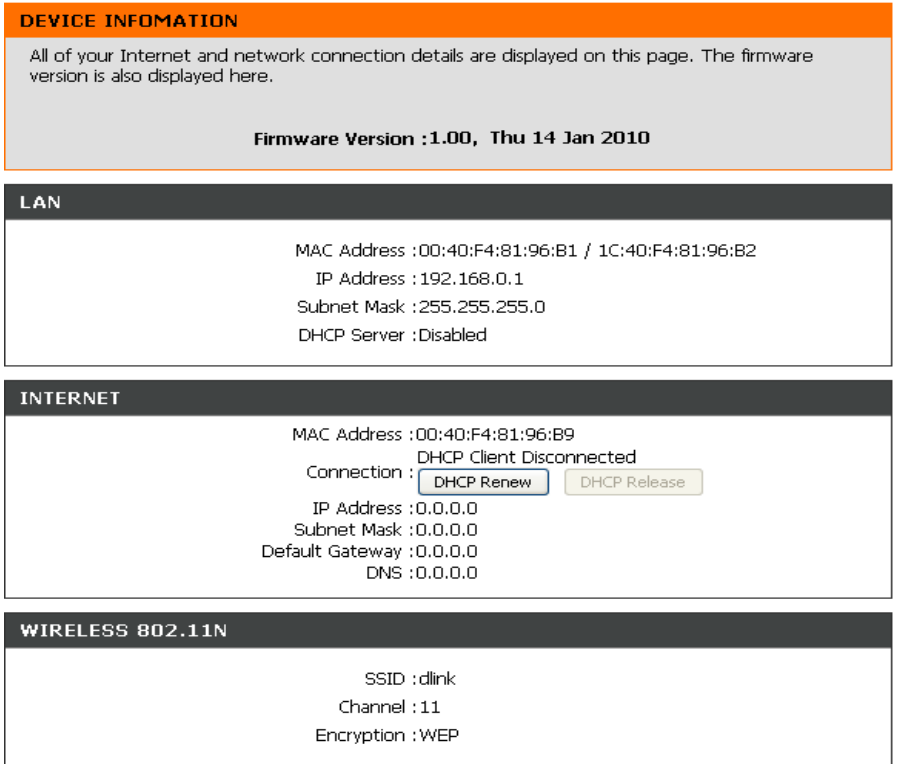
If your WAN connection is set up for a Dynamic IP address then a **DHCP Release** button and a **DHCP Renew** button will be displayed. Use **DHCP Release** to disconnect from your ISP and use **DHCP Renew** to connect to your ISP.

If your WAN connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

LAN: Displays the MAC address and the private (local) IP settings for the router.

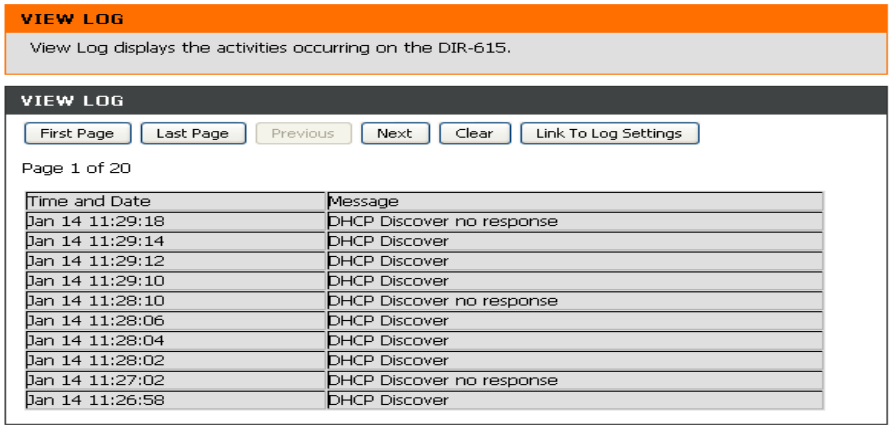
Internet: Displays the MAC address and the public IP settings for the router.

Wireless 802.11N: Displays the wireless MAC address and your wireless settings such as SSID, Channel, and Encryption status.



Log

This window allows you to view a log of activities on the Router. This is especially helpful detecting unauthorized network usage.



First Page: View the first page of the log.

Last Page: View the last page of the log.

Previous: View the previous page.

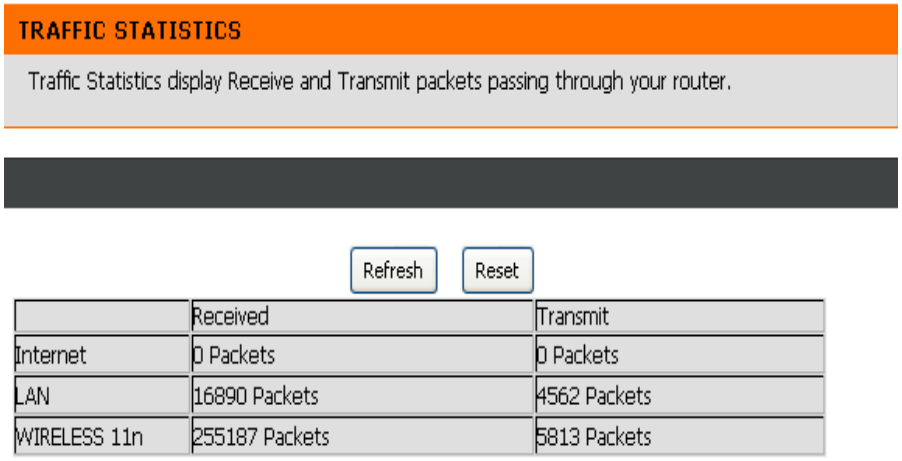
Next: View the next page.

Clear: Clear the log.

Link to Log Settings: Click this button to go directly to the Log Settings window (**Maintenance** > **Log Settings**).

Statistics

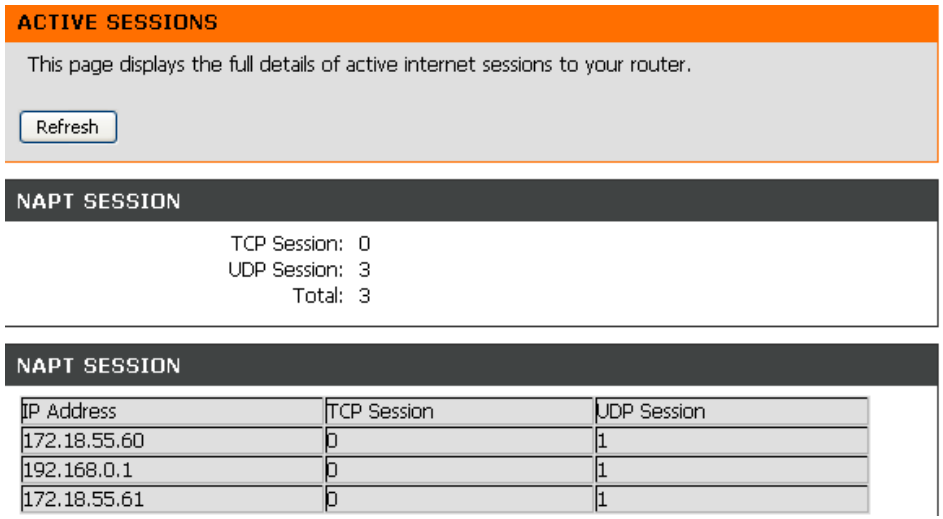
The window below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-618 on both the WAN and the LAN ports. The traffic counter will reset if the device is rebooted.



	Received	Transmit
Internet	0 Packets	0 Packets
LAN	16890 Packets	4562 Packets
WIRELESS 11n	255187 Packets	5813 Packets

Active Session

The NAPT Active Session table displays a list of all active conversations between WAN computers and LAN computers.



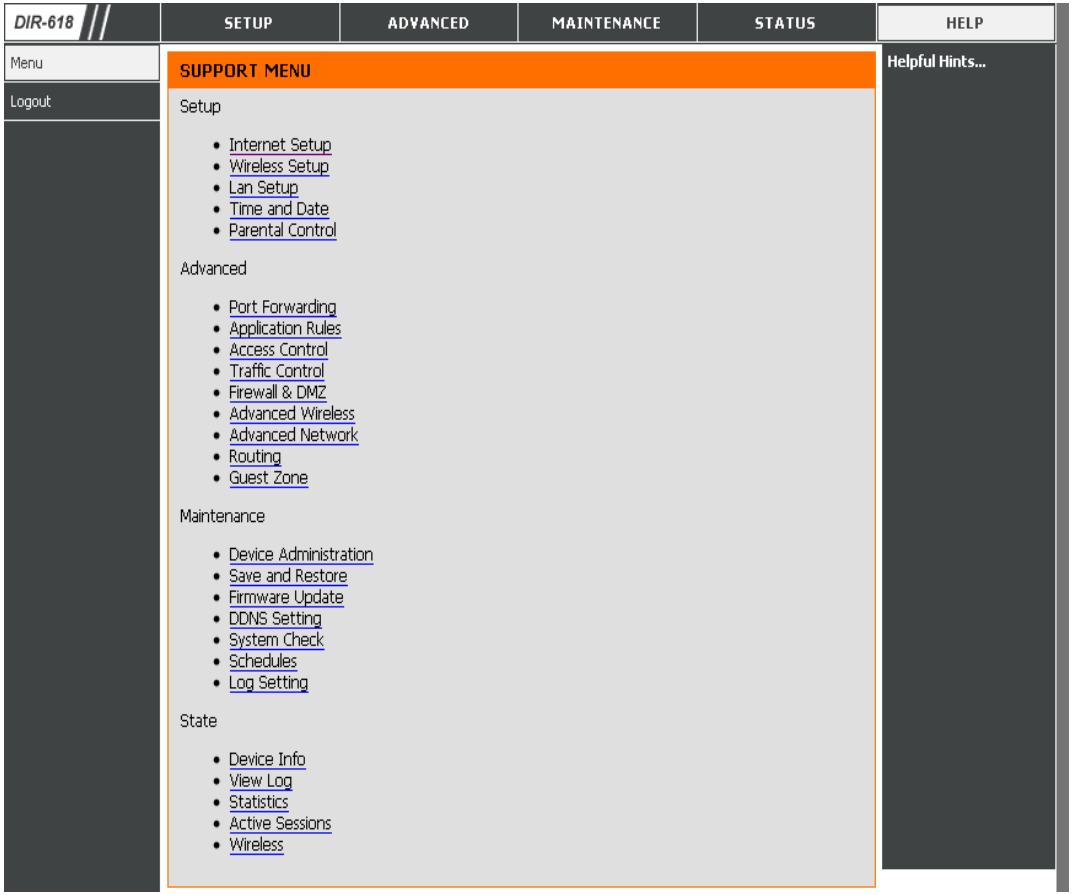
IP Address	TCP Session	UDP Session
172.18.55.60	0	1
192.168.0.1	0	1
172.18.55.61	0	1

Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless client.

Help

Click the desired hyperlink to get more information about how to use the Router.



Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-618 offers the following types of security:

- WPA/WPA2 (Auto)
- WEP (Wired Equivalent Privacy)

What is WEP?

WEP stands for Wired Equivalent Privacy. It is based on the IEEE 802.11 standard and uses the RC4 encryption algorithm. WEP provides security by encrypting data over your wireless network so that it is protected as it is transmitted from one wireless device to another.

To gain access to a WEP network, you must know the key. The key is a string of characters that you create. When using WEP, you must determine the level of encryption. The type of encryption determines the key length. 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format. ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined so that you can change keys easily.

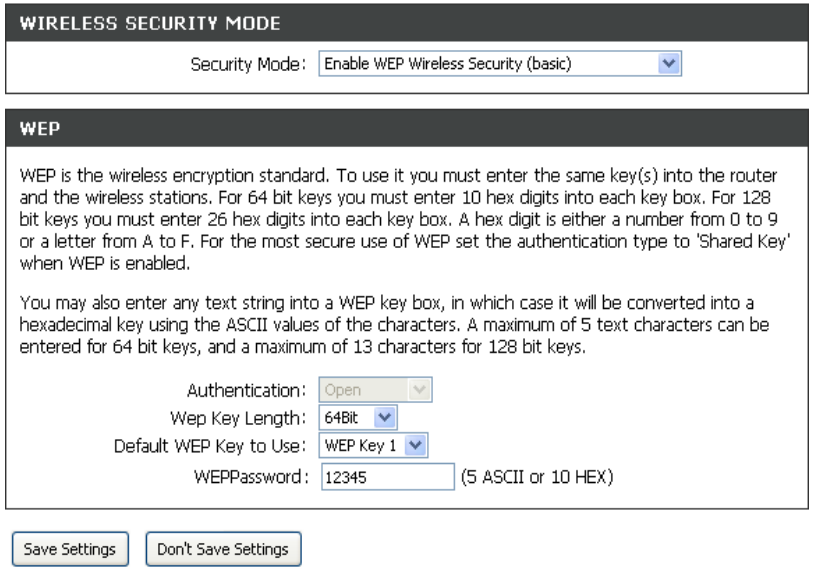
Configure WEP

It is recommended to enable encryption on your wireless router before you use wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Setup** on the left side.

2. Next to **Security Mode**, select *Enable WEP Wireless Security (basic)*.

3. Next to **Authentication**, select *Open*.


WIRELESS SECURITY MODE
Security Mode: Enable WEP Wireless Security (basic)
WEP
WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64 bit keys you must enter 10 hex digits into each key box. For 128 bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to 'Shared Key' when WEP is enabled.
You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64 bit keys, and a maximum of 13 characters for 128 bit keys.
Authentication: Open
Wep Key Length: 64Bit
Default WEP Key to Use: WEP Key 1
WEPPassword: 12345 (5 ASCII or 10 HEX)
Save Settings
Don't Save Settings

4. Select either *64Bit* or *128Bit* encryption from the drop-down menu next to **WEP Encryption**.

5. Next to **Default Key Type**, select *WEP Key 1* and enter a WEP key that you create. Make sure you enter this key exactly on all your wireless devices. You may enter up to four different keys either using *Hex* or *ASCII*. *Hex* is recommended (letters A-F and numbers 0-9 are valid). In *ASCII* all numbers and letters are valid.

6. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA/WPA2-PSK on your adapter and enter the same WEP key as you did on the router.

What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The two major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

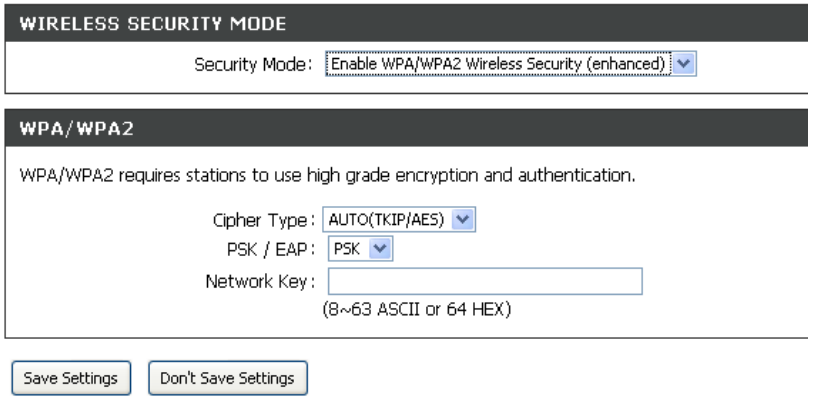
WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Configure WPA/WPA2-PSK

It is recommended to enable encryption on your wireless Router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Setup** on the left side.


WIRELESS SECURITY MODE
Security Mode: Enable WPA/WPA2 Wireless Security (enhanced)
WPA/WPA2
WPA/WPA2 requires stations to use high grade encryption and authentication.
Cipher Type: AUTO(TKIP/AES)
PSK / EAP: PSK
Network Key:
(8~63 ASCII or 64 HEX)
Save Settings
Don't Save Settings

2. Next to **Security Mode**, select *Enable WPA/WPA2 Wireless Security (enhanced)*.

3. Next to **Cipher Mode**, select *TKIP*, *AES*, or *Auto*.

4. Next to **PSK/EAP**, select *PSK*.

5. Next to **Network Key**, enter a key (passphrase). The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. Make sure you enter this key exactly the same on all other wireless clients.

6. Click **Save Settings** to save your settings. If you are configuring the Router with a wireless adapter, you will lose connectivity until you enable WPA/WPA2-PSK on your adapter and enter the same passphrase as you did on the Router.

Configure WPA/WPA2 (RADIUS)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Settings** on the left side.

2. Next to **Security Mode**, select *Enable WPA Only Wireless Security (enhanced), Enable WPA2 Only Wireless Security (enhanced),* or *Enable WPA/WPA2 Wireless Security (enhanced)*.

3. Next to **Cipher Type**, select *TKIP*, *AES*, or *Auto*.

4. Next to **PSK/EAP**, select *EAP*.

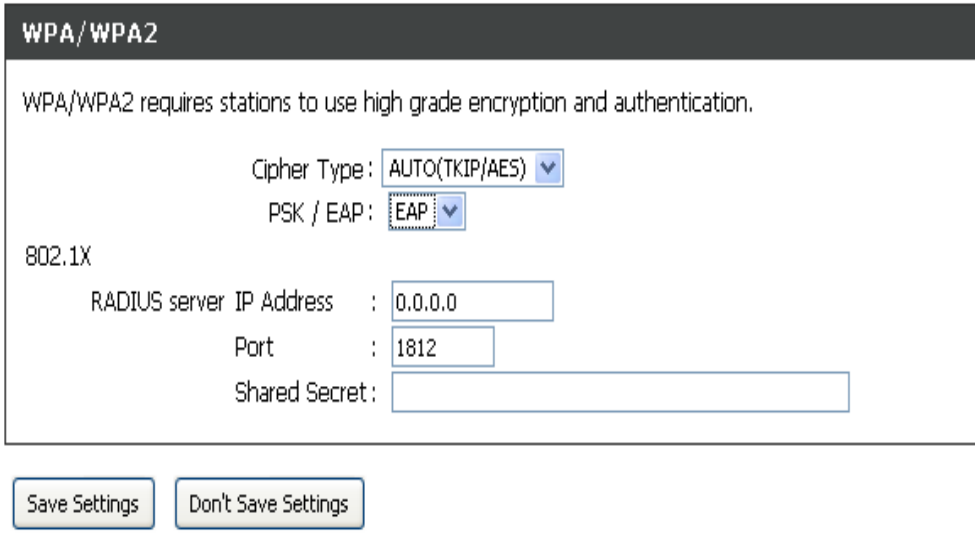
5. Next to **RADIUS Server** enter the **IP Address** of your RADIUS server.

6. Next to **Port**, enter the port you are using with your RADIUS server. *1812* is the default port.

7. Next to **Shared Secret**, enter the security key.

8. If you have a secondary RADIUS server, enter its IP address, port, and secret key.

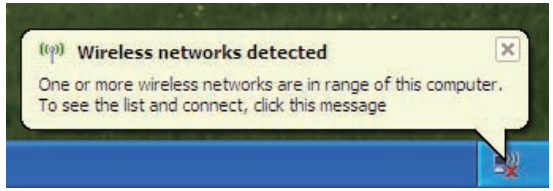
9. Click **Save Settings** to save your settings.



Connect to a Wireless Network Using Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

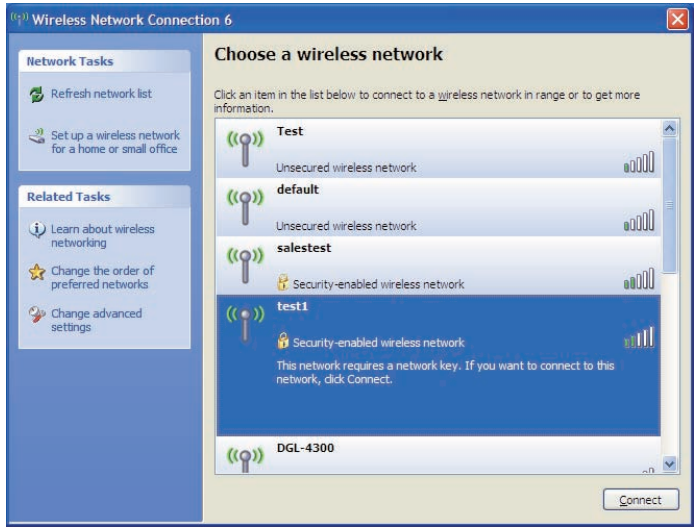

Wireless networks detected
One or more wireless networks are in range of this computer.
To see the list and connect, click this message

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.

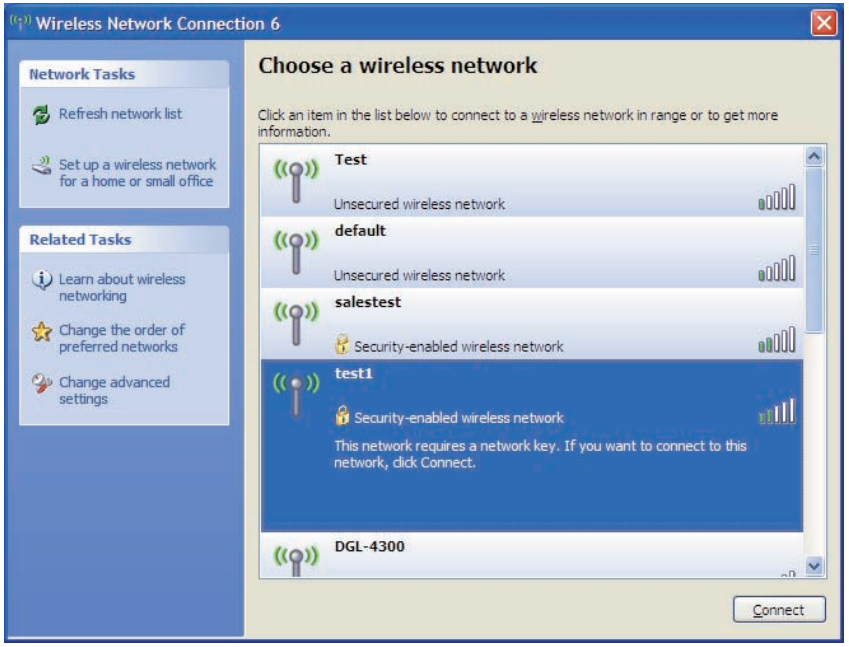

Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

Configure WEP

It is recommended to enable WEP on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WEP key being used.

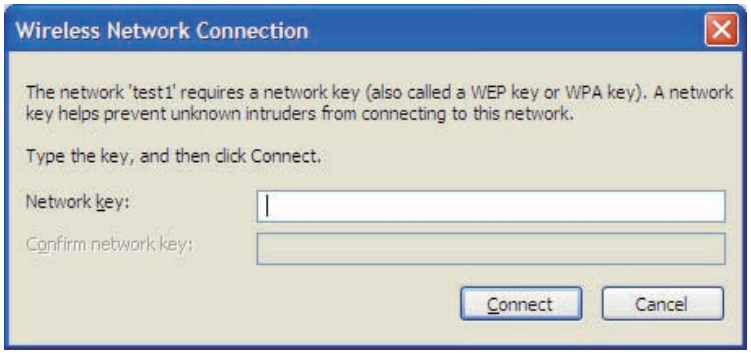
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.


Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

3. The **Wireless Network Connection** box will appear. Enter the same WEP key that is on your router and click **Connect**.

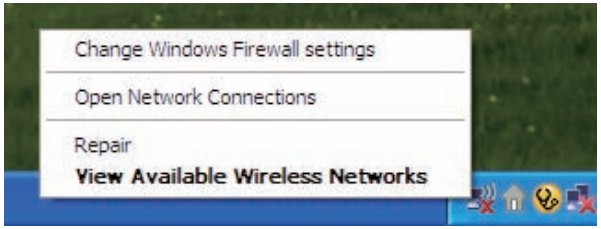
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WEP settings are correct. The WEP key must be exactly the same as on the wireless router.


Wireless Network Connection
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

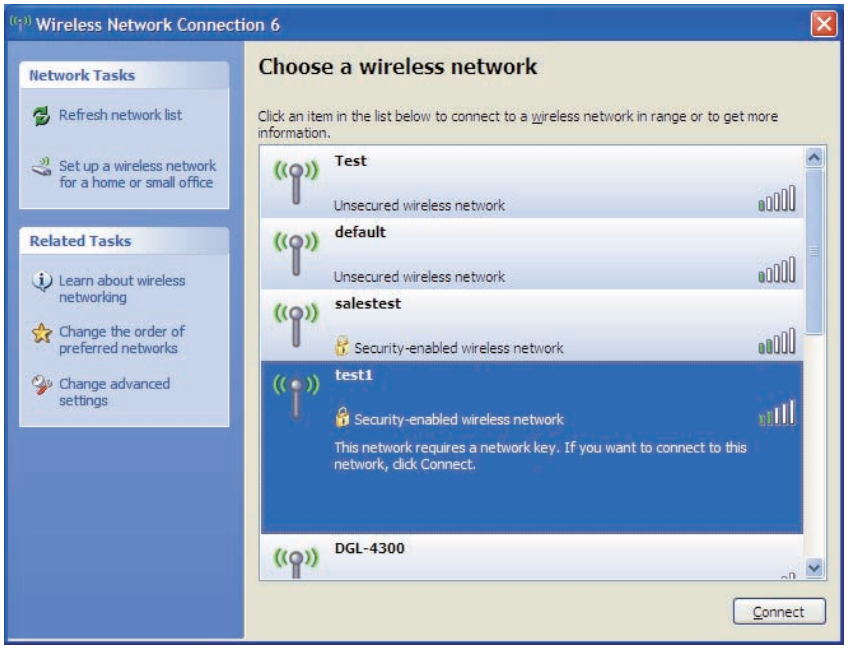
Configure WPA-PSK

It is recommended to enable WEP on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WEP key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.



2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.


Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

3. The **Wireless Network Connection** box will appear. Enter the same WPA-PSK passphrase that is on your router and click **Connect**.

Wireless Network Connection
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.

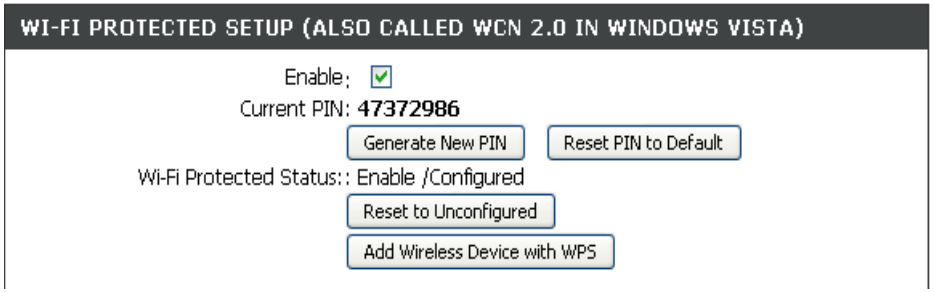
Setting Up Wi-Fi Protection (WCN 2.0 in Windows Vista)

The DIR-618 supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista. The instructions for setting this up depend on whether you are using Windows Vista to configure the Router or third party software.

Initial Router Configuration for Wi-Fi Protection

When you first set up the Router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the Router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or use the traditional Ethernet approach.

If you are running Windows Vista, tick the Enable checkbox on the **Wireless Network** window. Use the Current PIN that is displayed on the **Wireless Network** window or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.


WI-FI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)
Enable:
Current PIN: 47372986
Generate New PIN
Reset PIN to Default
Wi-Fi Protected Status:: Enable /Configured
Reset to Unconfigured
Add Wireless Device with WPS

If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured Router.

Setting Up a Configured Router

Once the Router has been configured, you can use the push button on the Router or third party software to invite a newcomer to join your Wi-Fi protected network. For maximum security, the software method is recommended. However, the push button method is ideal if there is no access to a GUI.

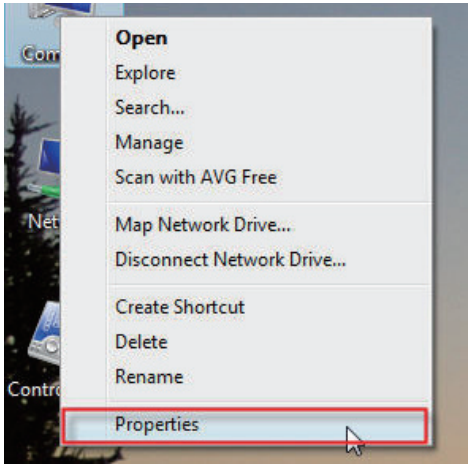
If you are using the Router's Wi-Fi Security push button option, simultaneously depress the push button located on the side of the Router and the button on the client (or virtual button on the client's GUI). Next click **Finish**. The Client's software will then allow a newcomer to join your secure, Wi-Fi protected network.

If you are using third party software, run the appropriate Wi-Fi Protected System utility. You will be asked to either use the push button method or to manually enter the PIN. Follow the on-screen instructions.

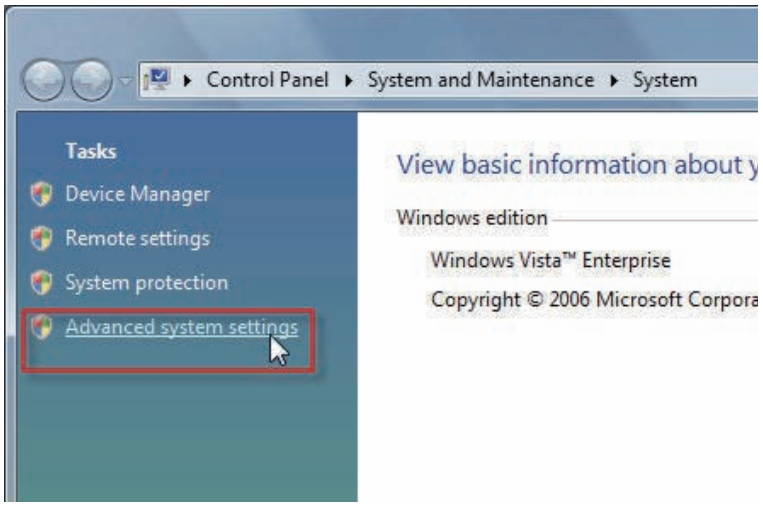
Changing the Computer Name and Joining a Workgroup

The following are step-by-step directions to change the computer name and join a workgroup.

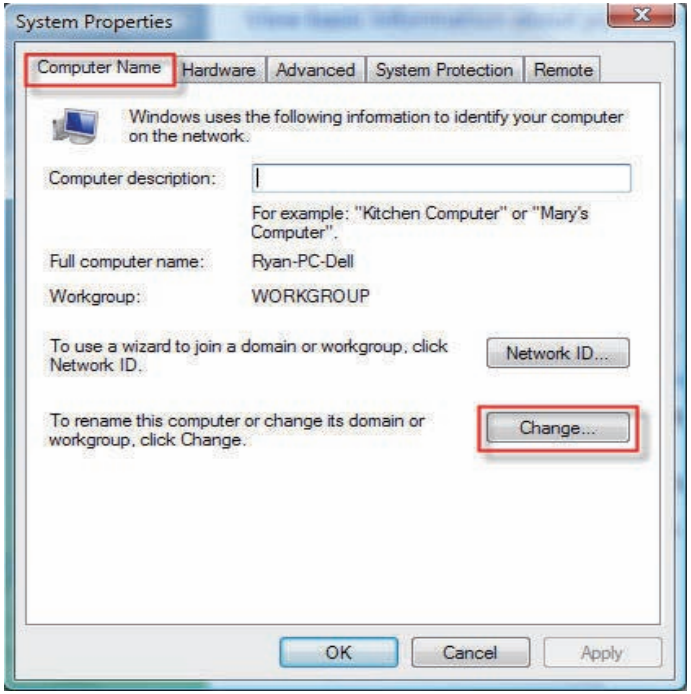
1. Click on **Properties**.



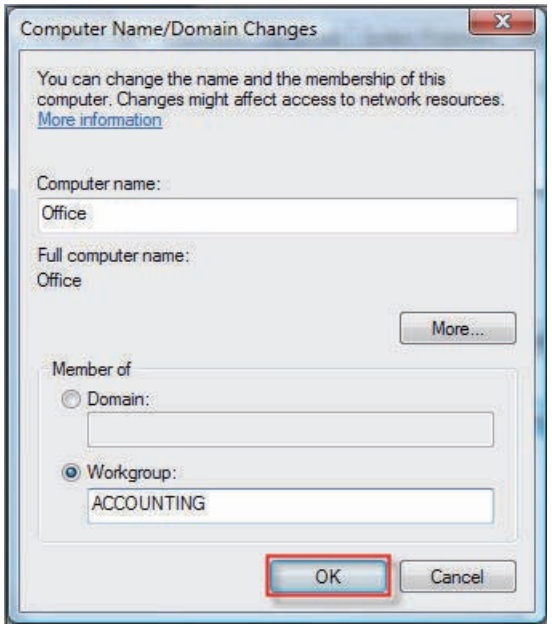
2. Click on the **Advanced system settings** link.



3. Click the **Computer Name** tab in the **System Properties** window and enter a description of your computer in the textbox. When you are finished, click the **Change** button.



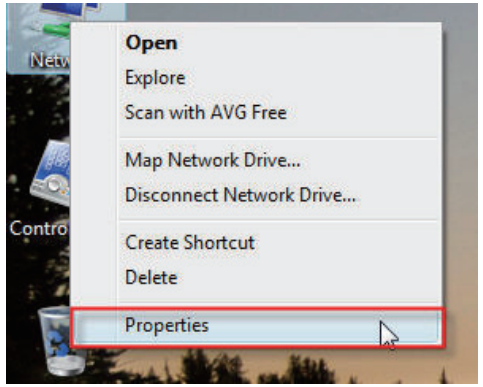
4. Go to the **Computer Name/Domain Changes** window and click the radio button next to the Workgroup you want to join. When you are finished, click the **OK** button.



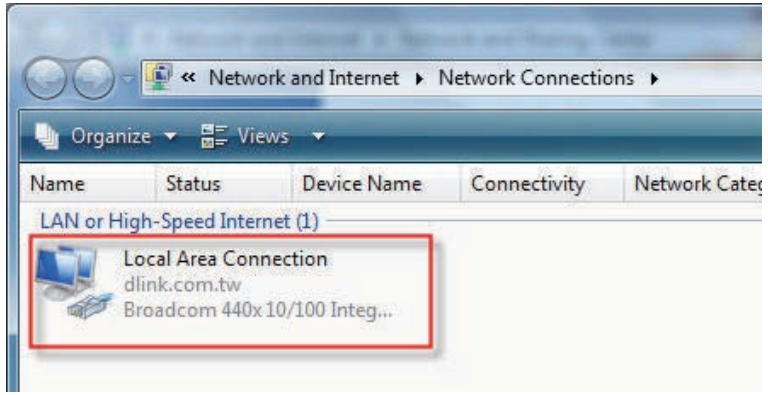
Configuring the IP Address in Vista

The following are step-by-step directions to configure the IP address in Windows Vista.

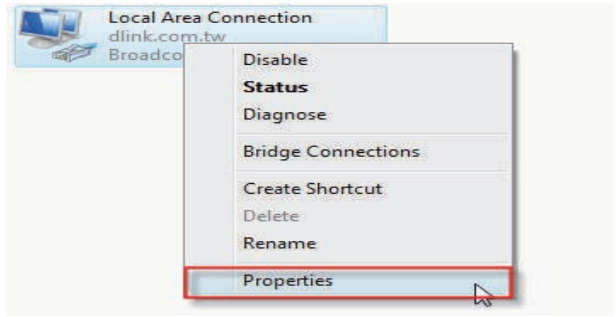
1. Click on **Properties**.



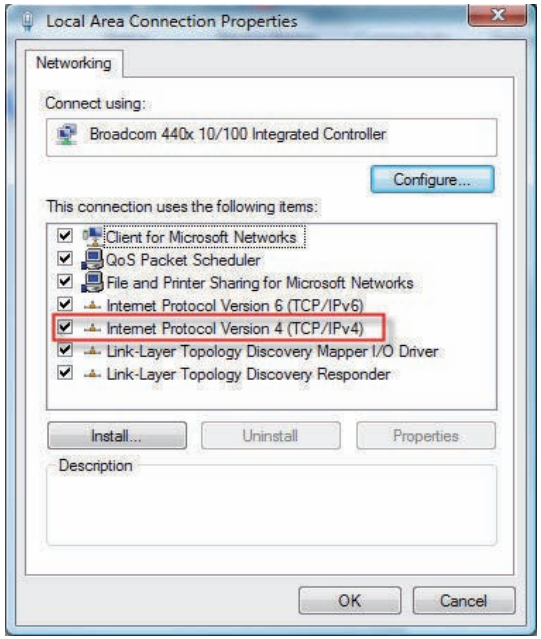
2. Go to the **Network and Internet** window and click the appropriate **Local Area Connection** icon.



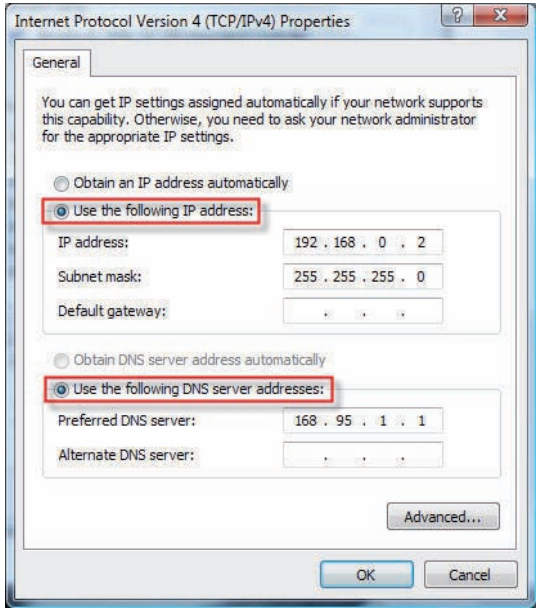
3. Right-click the **Local Area Connection** icon and then select **Properties** from the drop-down menu.



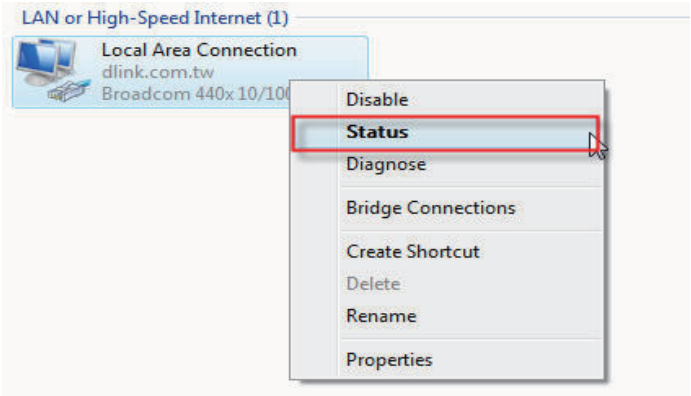
4. Tick the **Internet Protocol Version 4 (TCP/IPv4)** checkbox in the **Networking** tab in the **Local Area Connection Properties** window.



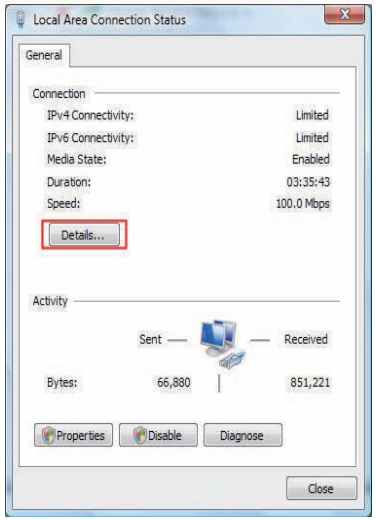
5. Click the “Use the following IP address” option in the **General** tab in the **Local Area Connections Properties** window and enter the desired IP address in the space offered. Then click the “Use the following DNS server adresses” option on the same tab and enter the desired DNS server information.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 0 . 2
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 168 . 95 . 1 . 1
Alternate DNS server:
Advanced...
OK
Cancel

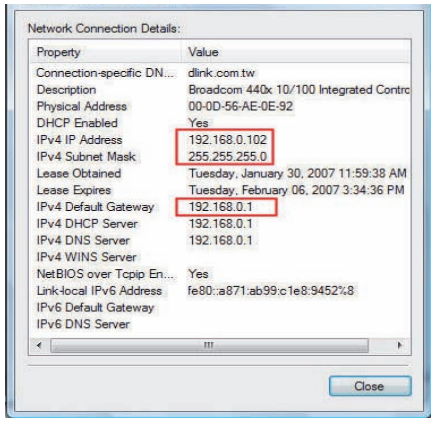
6. Right-click the **Local Area Connection** icon and then select **Status** from the drop-down menu.



7. Go to the **Local Area Connection Status** window and click the **Details** button.



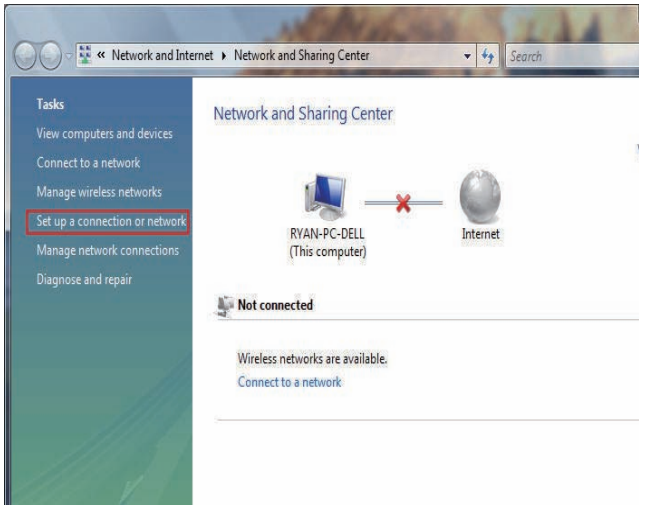
8. Confirm your new settings on the **Network Connection Status** window. When you are finished, click the **Done** button.



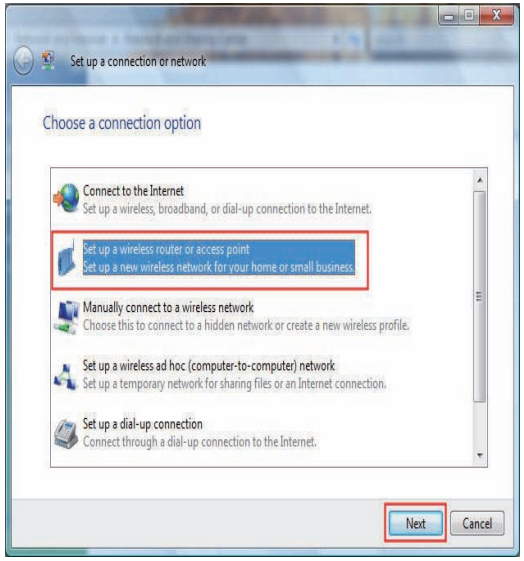
Setting Up a Connection or Network Wirelessly

The following are step-by-step directions to set up a wireless connection.

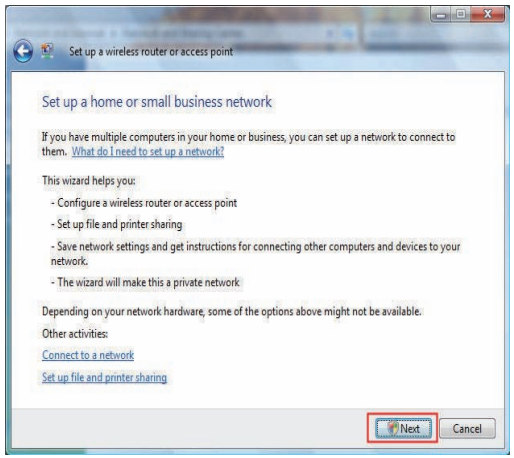
1. Click on **Set up a connection or network** in the **Network and Sharing Center** section.



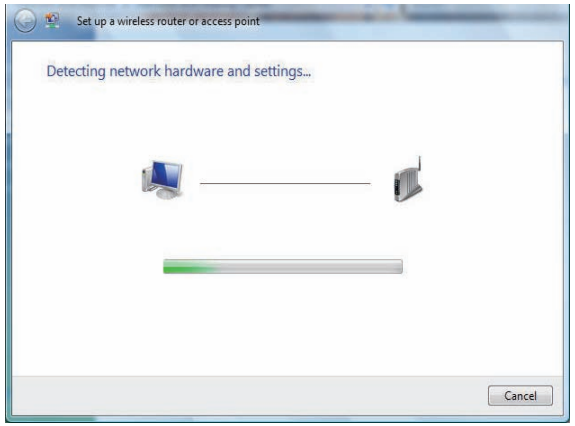
2. Go to the **Set up a connection or network** window and choose the **Set up a wireless router or access point Set up a new wireless network for your home or business** option. Click the **Next** button.


Set up a connection or network
Choose a connection option
Connect to the Internet
Set up a wireless, broadband, or dial-up connection to the Internet.
Set up a wireless router or access point
Set up a new wireless network for your home or small business
Manually connect to a wireless network
Choose this to connect to a hidden network or create a new wireless profile.
Set up a wireless ad hoc (computer-to-computer) network
Set up a temporary network for sharing files or an Internet connection.
Set up a dial-up connection
Connect through a dial-up connection to the Internet.
Next
Cancel

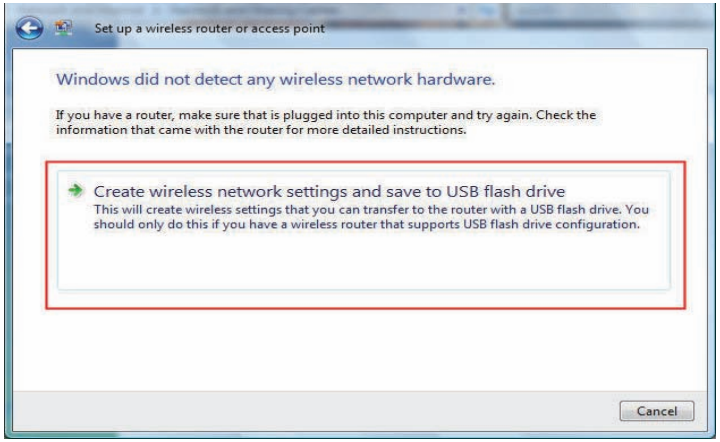
3. Click the **Next** button on the **Set up a wireless router or access point** window.


Set up a wireless router or access point
Set up a home or small business network
If you have multiple computers in your home or business, you can set up a network to connect to them. What do I need to set up a network?
This wizard helps you:
- Configure a wireless router or access point
- Set up file and printer sharing
- Save network settings and get instructions for connecting other computers and devices to your network.
- The wizard will make this a private network
Depending on your network hardware, some of the options above might not be available.
Other activities:
Connect to a network
Set up file and printer sharing
Next
Cancel

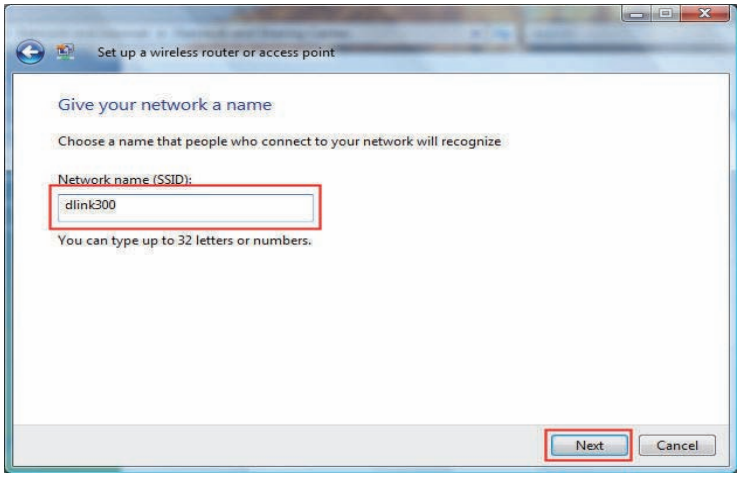
4. The following window displays the system progress.



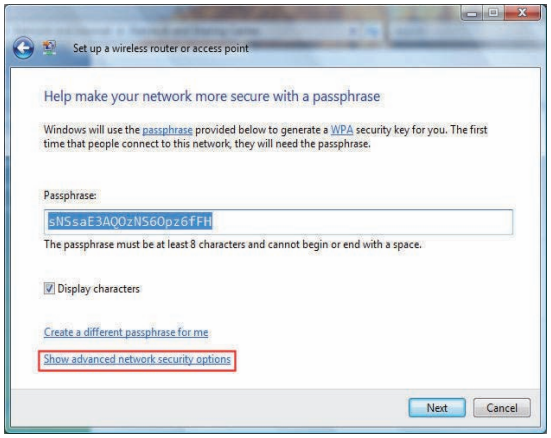
5. This window confirms that you want to create wireless network settings that are savable to a USB flash drive.


Set up a wireless router or access point
Windows did not detect any wireless network hardware.
If you have a router, make sure that is plugged into this computer and try again. Check the information that came with the router for more detailed instructions.
Create wireless network settings and save to USB flash drive
This will create wireless settings that you can transfer to the router with a USB flash drive. You should only do this if you have a wireless router that supports USB flash drive configuration.
Cancel

6. Enter a network name on the **Give your network a name** window in the **Set up a wireless router or access point** wizard. Click the **Next** button.


Set up a wireless router or access point
Give your network a name
Choose a name that people who connect to your network will recognize
Network name (SSID):
dlink300
You can type up to 32 letters or numbers.
Next
Cancel

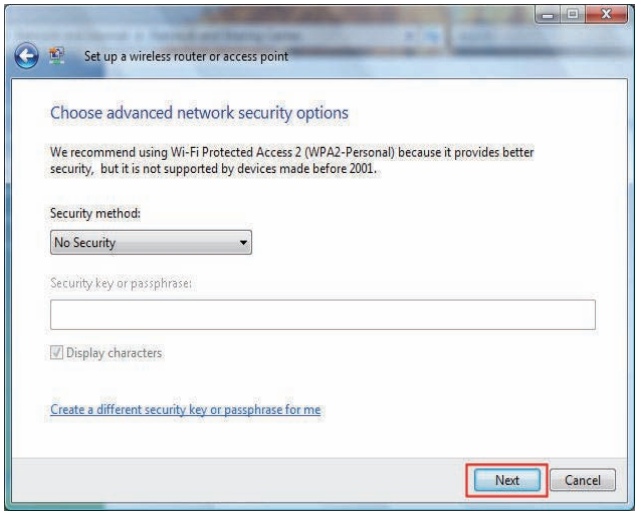
7. Enter a passphrase on the **Help make your network more secure with a passphrase** window in the **Set up a wireless router or access point** wizard. Click the **Show advanced network security options** link.


Set up a wireless router or access point
Help make your network more secure with a passphrase
Windows will use the passphrase provided below to generate a WPA security key for you. The first time that people connect to this network, they will need the passphrase.
Passphrase:
sNSsaE3AQOzNS6Opz6fFH
The passphrase must be at least 8 characters and cannot begin or end with a space.
Display characters
Create a different passphrase for me
Show advanced network security options
Next
Cancel

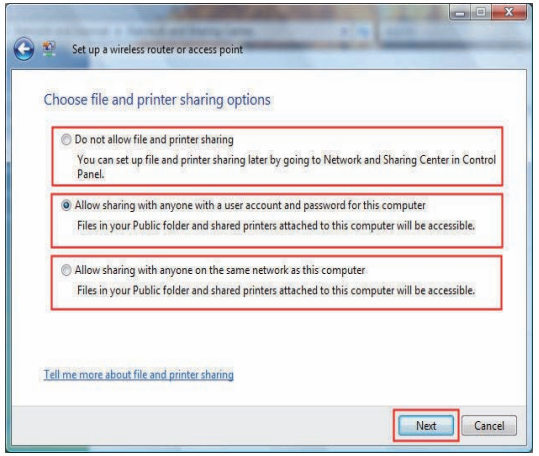
8. Select security method on the **Choose advanced network security options** window in the **Set up a wireless router or access point** wizard. Click the **Next** button.

Set up a wireless router or access point
Choose advanced network security options
We recommend using Wi-Fi Protected Access 2 (WPA2-Personal) because it provides better security, but it is not supported by devices made before 2001.
Security method:
WPA-Personal
WPA-Personal
WPA2-Personal
WEP
No Security
Display characters
Create a different security key or passphrase for me
Next
Cancel

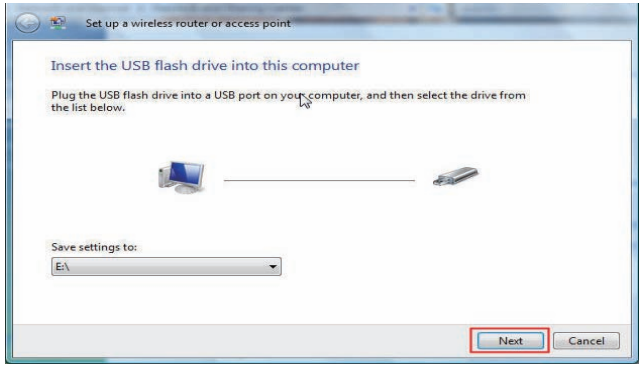
9. Once you have selected the desired security method on the **Choose advanced network security options** window in the **Set up a wireless router or access point** wizard, click the **Next** button.


Set up a wireless router or access point
Choose advanced network security options
We recommend using Wi-Fi Protected Access 2 (WPA2-Personal) because it provides better security, but it is not supported by devices made before 2001.
Security method:
No Security
Security key or passphrase:
Display characters
Create a different security key or passphrase for me
Next
Cancel

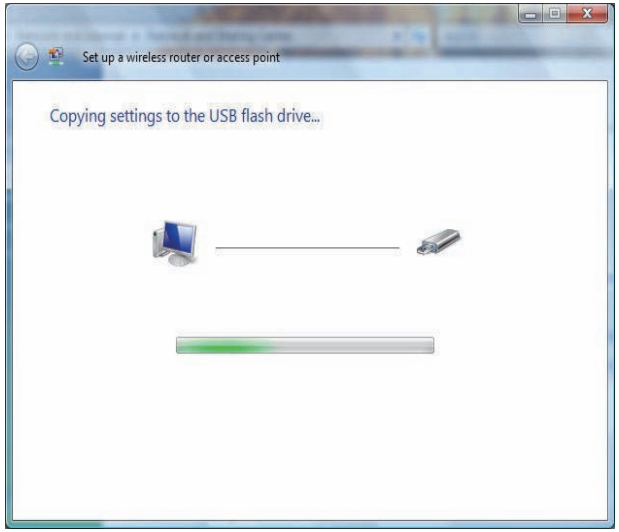
10. Select the desired file and printer sharing option on the **Choose file and printer sharing options** window in the **Set up a wireless router or access point** wizard. Click the **Next** button.


Set up a wireless router or access point
Choose file and printer sharing options
Do not allow file and printer sharing
You can set up file and printer sharing later by going to Network and Sharing Center in Control Panel.
Allow sharing with anyone with a user account and password for this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
Allow sharing with anyone on the same network as this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
Tell me more about file and printer sharing
Next
Cancel

11. Once you have saved your network settings to USB, use the pull-down menu on the **Insert the USB flash drive into this computer** window in the **Set up a wireless router or access point** wizard to select a destination for your network settings. Click the **Next** button.


Set up a wireless router or access point
Insert the USB flash drive into this computer
Plug the USB flash drive into a USB port on your computer, and then select the drive from the list below.
Save settings to:
E:\
Next
Cancel

12. Once you have saved your network settings to USB, the **Copying settings to the USB drive** window in the **Set up a wireless router or access point** wizard opens to indicate the system progress.



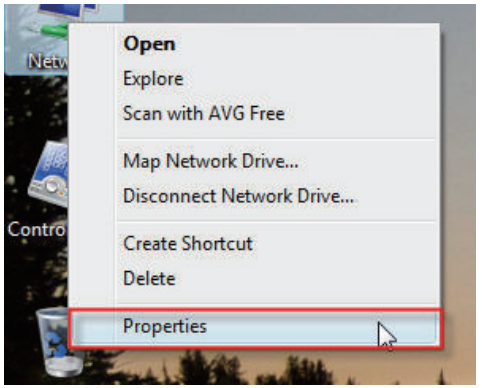
13. Once you are finished, the **To add a device or computer, follow these instructions** window in the **Set up a wireless router or access point** wizard opens. When you are finished, click the **Close** button.

Set up a wireless router or access point
To add a device or computer, follow these instructions
1 Remove the USB flash drive from this computer.
2 Insert the USB flash drive into a USB port on the device or the computer. (Computers must be running Windows XP or Windows Vista.)
3 For devices, follow the instructions in the information that came with the device, or on the LCD of the device, if applicable.
For more detailed instructions, click here.
Repeat steps 2 and 3 for each device or computer that you want to add.
Close

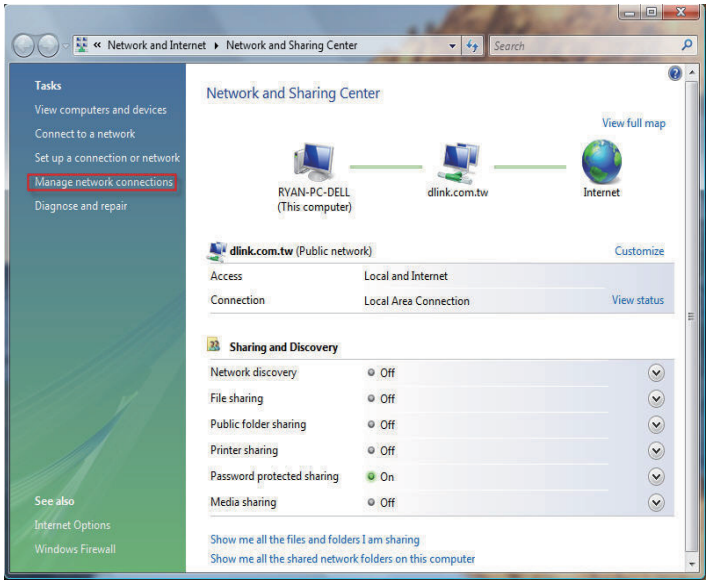
Connecting to a Secured Wireless Network (WEP, WPA-PSK & WPA2-PSK)

The following are step-by-step directions to set up a wireless connection.

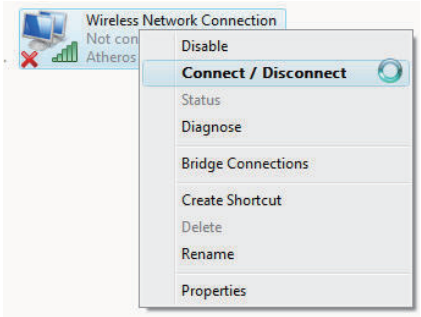
1. Click on **Properties**.



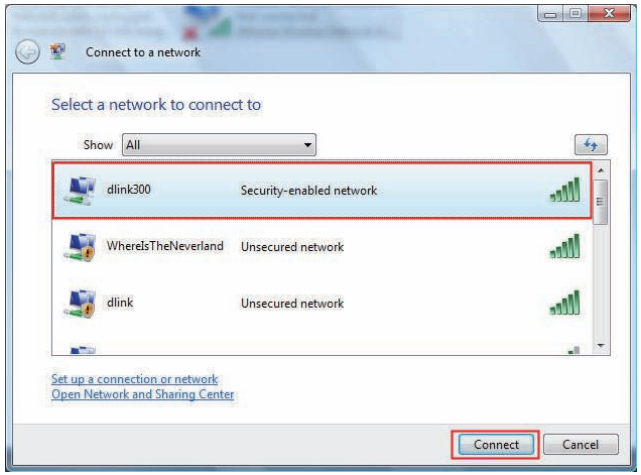
2. Click the **Manage network connections** link in the **Network and Sharing Center** window.



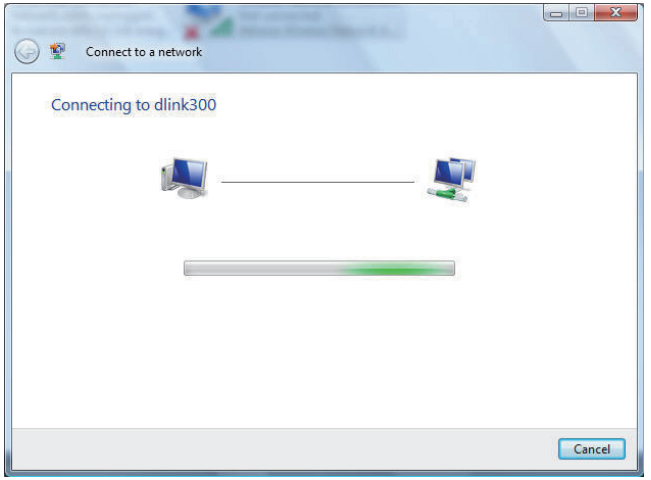
3. Right-click the **Wireless Network Connection** entry and then select **Connect/Disconnect** from the drop-down menu.



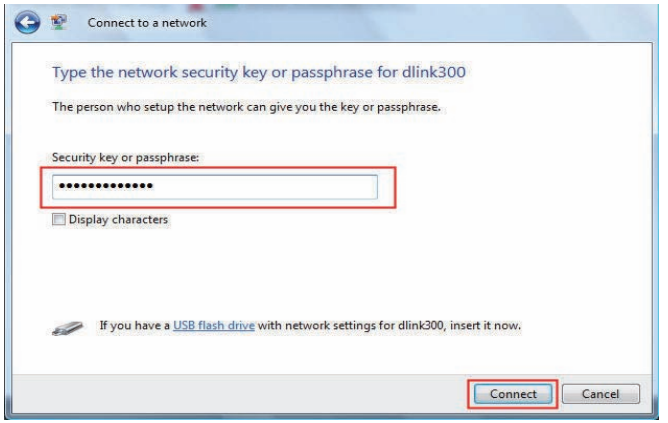
4. Select a network to connect to in the **Select a network to connect to** window in the **Connect to a network** wizard and then click the **Connect** button.



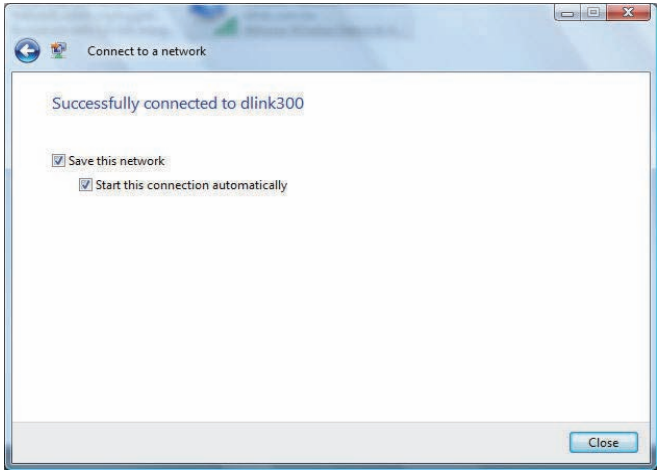
5. The following **Connect to a network** wizard window displays the system progress.



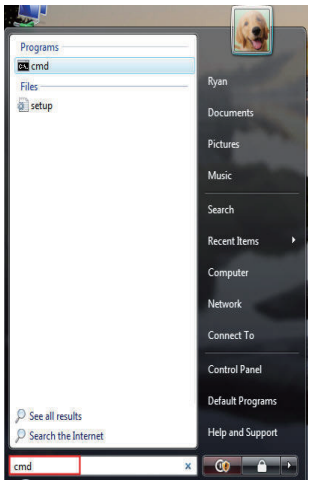
6. Enter the network security key or passphrase for the Router in the textbox provided in the **Type the network security key or passphrase for dlink** window in the **Connect a network** wizard. When you are finished, click the **Connect** button.


Connect to a network
Type the network security key or passphrase for dlink300
The person who setup the network can give you the key or passphrase.
Security key or passphrase:
Display characters
If you have a USB flash drive with network settings for dlink300, insert it now.
Connect
Cancel

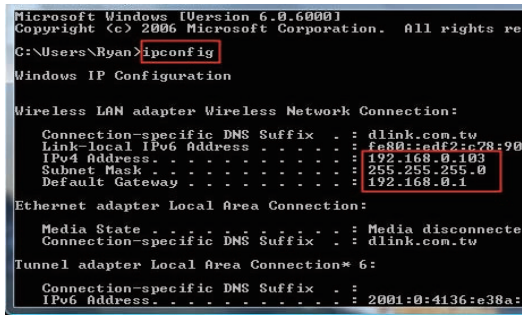
7. The following **Successfully connected to dlink** window in the **Connect to a network** wizard is displayed. Choose to save to the network and/or start the new connection automatically. When you are finished, click the **Close** button.



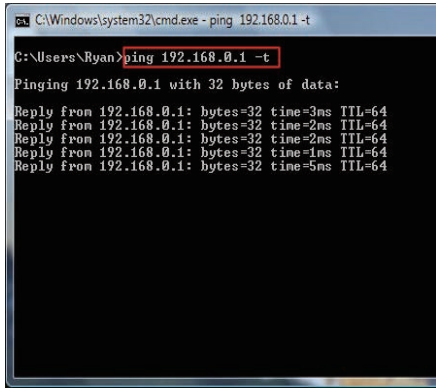
8. Enter **cmd** in the search box at the bottom of start menu window and press **Enter**.



9. Confirm your new settings by calling up the command prompt and then entering the ipconfig command.


Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation. All rights re
C:\Users\Ryan>ipconfig
Windows IP Configuration
Wireless LAN adapter Wireless Network Connection:
Connection-specific DNS Suffix . : dlink.com.tw
Link-local IPv6 Address . . . . . : fe80::edf2:ic78:90
IPv4 Address. . . . . : 192.168.0.103
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.0.1
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnecte
Connection-specific DNS Suffix . : dlink.com.tw
Tunnel adapter Local Area Connection* 6:
Connection-specific DNS Suffix . :
IPv6 Address. . . . . : 2001:0:4136:e38a:

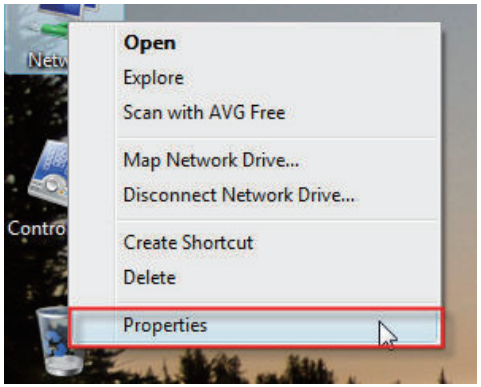
10. To test the new IP address, use the Ping feature of the command prompt.


C:\Windows\system32\cmd.exe - ping 192.168.0.1 -t
C:\Users\Ryan>ping 192.168.0.1 -t
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time=3ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time=1ms TTL=64
Reply from 192.168.0.1: bytes=32 time=5ms TTL=64

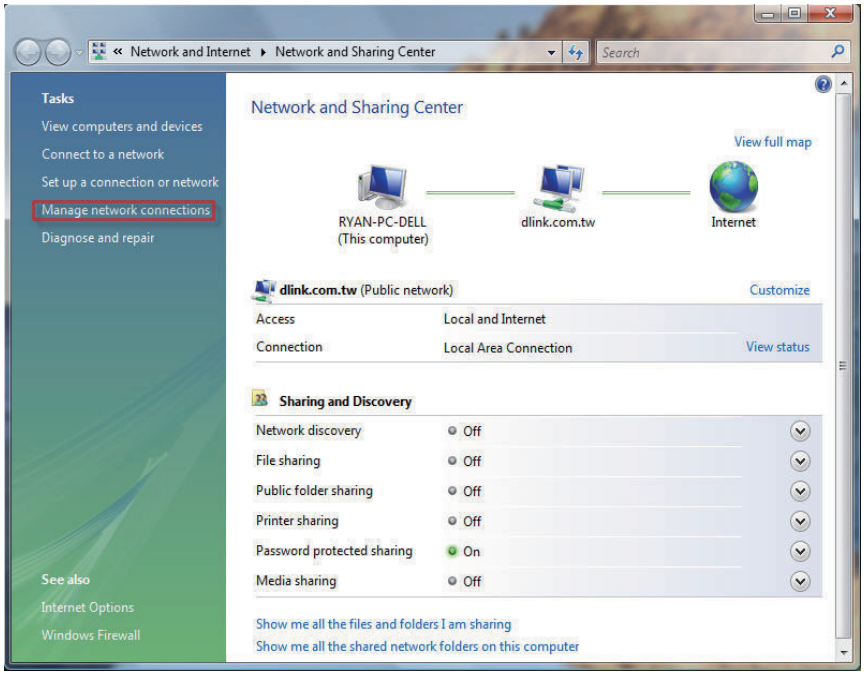
Connecting to an Unsecured Wireless Network

The following are step-by-step directions to set up an unsecured wireless connection.

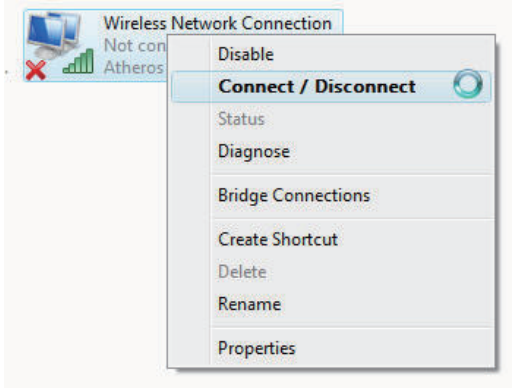
1. Click on **Properties**.



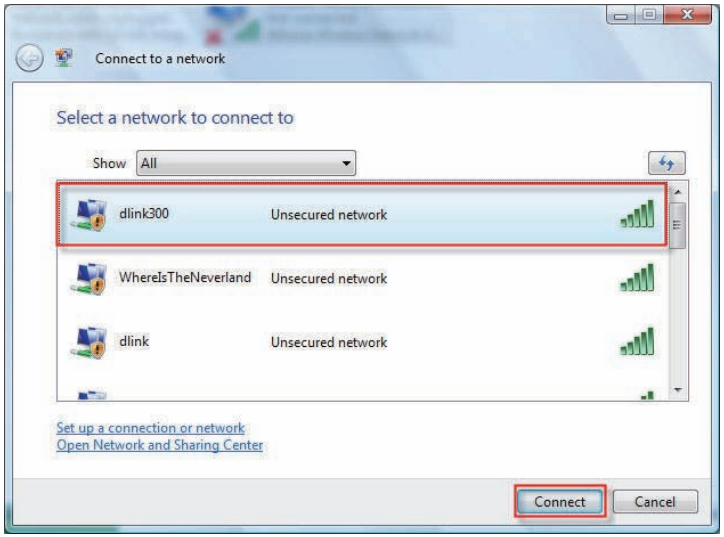
2. Go to the **Network and Sharing Center** window and click the **Manage Network Connections** link.



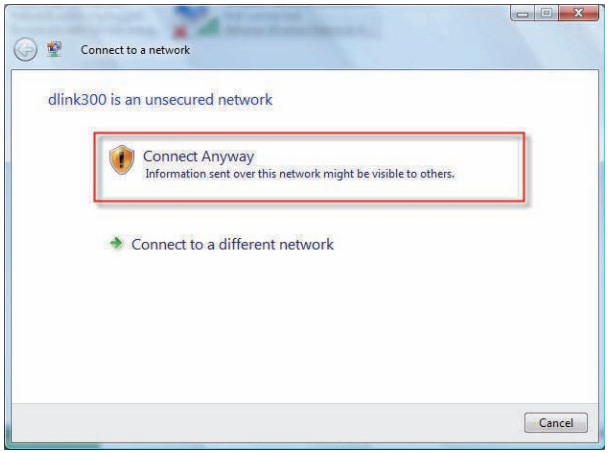
3. Right-click the **Wireless Network Connection** entry and then select **Connect/Disconnect** from the drop-down menu.



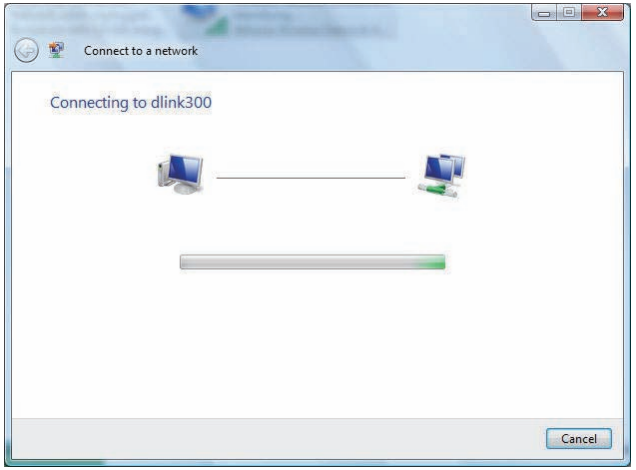
4. Select a network to connect to in the **Select a network to connect to** window in the **Connect to a network** wizard and then click the **Connect** button.



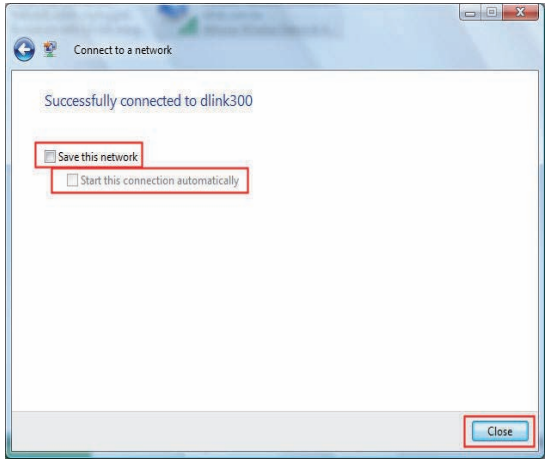
5. Confirm your desire to connect anyway on the following **Network Connection Status** window.


Connect to a network
dlink300 is an unsecured network
Connect Anyway
Information sent over this network might be visible to others.
Connect to a different network
Cancel

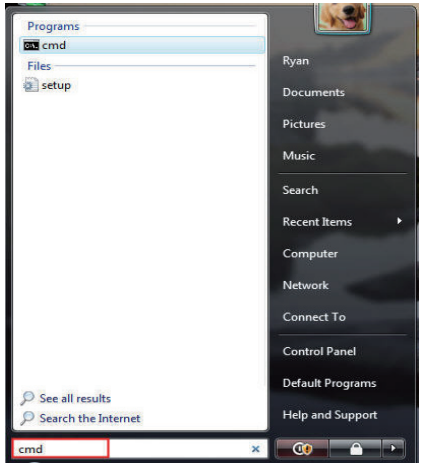
6. The following **Connect to a network** wizard window displays the system progress.



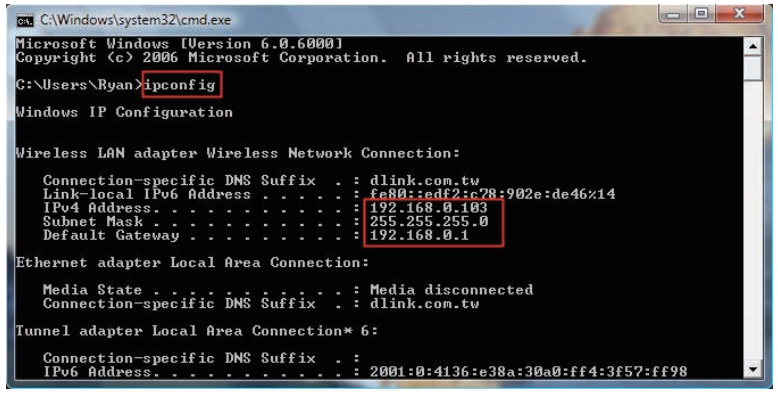
7. The following **Successfully connected to dlink** window in the **Connect to a network** wizard is displayed. Choose to save to the network and/or start the new connection automatically. When you are finished, click the **Close** button.



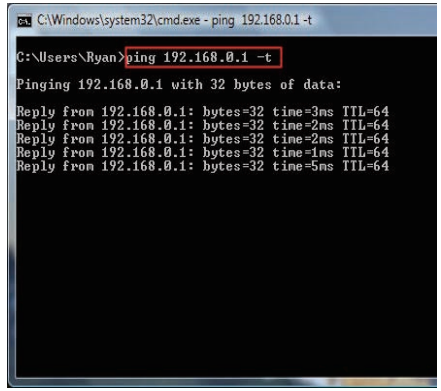
8. The successful connection is displayed at the bottom of the Windows start up menu.



9. Confirm your new settings by calling up the command prompt and then entering the ipconfig command.


C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.
C:\Users\Ryan>ipconfig
Windows IP Configuration
Wireless LAN adapter Wireless Network Connection:
Connection-specific DNS Suffix . : dlink.com.tw
Link-local IPv6 Address . . . . . : fe80::edf2:c78:902e:de46%14
IPv4 Address. . . . . : 192.168.0.103
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.0.1
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : dlink.com.tw
Tunnel adapter Local Area Connection* 6:
Connection-specific DNS Suffix . :
IPv6 Address. . . . . : 2001:0:4136:e38a:30a0:ff4:3f57:ff98

10. To test the new IP address, use the Ping feature of the command prompt.


C:\Windows\system32\cmd.exe - ping 192.168.0.1 -t
C:\Users\Ryan>ping 192.168.0.1 -t
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time=3ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time=1ms TTL=64
Reply from 192.168.0.1: bytes=32 time=5ms TTL=64

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-618. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Netscape 8 or higher
  - Mozilla 1.7.12 (5.0) or higher
  - Opera 8.5 or higher
  - Safari 1.2 or higher (with Java 1.3.1 or higher)
  - Camino 0.8.4 or higher
  - Firefox 2.0 or higher

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.

- Disable any internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:

    - Go to **Start** > **Settings** > **Control Panel**. Double-click the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.

    - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the **LAN Settings** button. Make sure nothing is checked. Click **OK**.

    - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.

    - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.

- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

Note: AOL DSL+ users must use MTU of 1400.

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, and XP users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

  ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482

Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:

Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum =  0ms, Average =  0ms

C:\>ping yahoo.com -f -l 1472

Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:

Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum =  203ms, Average =  132ms

C:\>
```

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click the **Save Settings** button to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check email, instant message, and etc
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like airports, hotels, coffee shops, libraries, restaurants, and convention centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.
For the wireless repeater, there are two types of repeater in D-Link for user to select:

- Universal repeater: It acts as an AP and a wireless STA at the same time. It can support all AP and wireless STA if they work in the same wireless channel.
- AP-repeater (AP with WDS): only repeat same model or limited models which base on the same proprietary protocol.

Please choose a universal repeater to boost the signal to extend the range.

Wireless Modes

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more WNA-2330 wireless network Cardbus adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

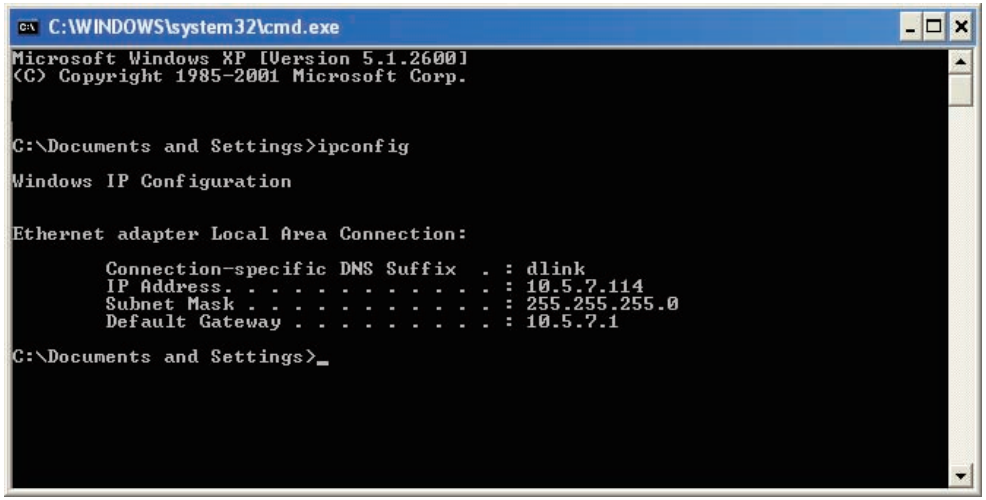
Check your IP address

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK**.

At the prompt, type ***ipconfig*** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.


C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : dlink
IP Address. . . . . : 10.5.7.114
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.5.7.1
C:\Documents and Settings>

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

If you are connecting to a wireless network at a hotspot (e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.

Statically Assign an IP address

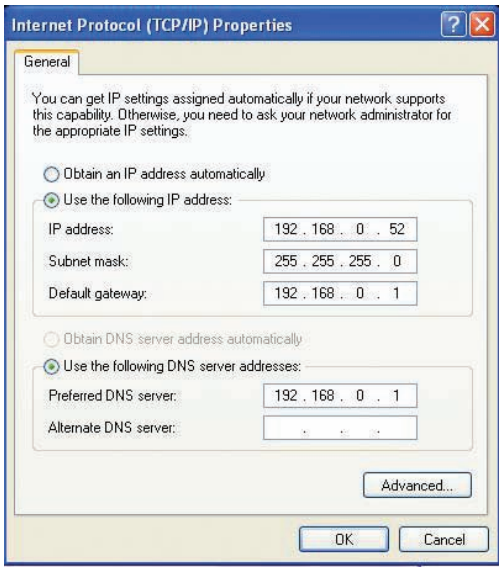
If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Step 1
Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.
Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2
Right-click on the **Local Area Connection** which represents your D-Link network adapter and select **Properties**.

Step 3
Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

Step 4
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 0 . 52
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 0 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 192 . 168 . 0 . 1
Alternate DNS server:
Advanced...
OK
Cancel

Example: If the router´s LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5
Click **OK** twice to save your settings.

Technical Specifications

Standards

- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x

Wireless Signal Rates*

- 300Mbps
- 150Mbps
- 54Mbps
- 36Mbps
- 18Mbps
- 11Mbps
- 6Mbps
- 2Mbps
- 48Mbps
- 24Mbps
- 12Mbps
- 9Mbps
- 5.5Mbps
- 1Mbps

Security

- WPA/WPA2 - Wi-Fi Protected Access (TKIP, MIC, IV Expansion, Shared Key Authentication)
- 802.1x
- 64/128-bit WEP

VPN Pass Through/ Multi-Sessions
- PPTP
- IPSec

Device Management
- Web-based Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Java-enabled browsers
- DHCP Server and Client

Wireless Frequency Range
2.4GHz to 2.497GHz (802.11b)
2.4GHz to 2.4835GHZ ((802.11g and 802.11n))

Wireless Operating Range2
- Indoors - up to 328 ft. (100 meters)
- Outdoors- up to 1312 ft. (400 meters)

Wireless Transmit Power (AVG Power)
11b:17dBm(Max) 11g:16dBm(Max)
11n:14dBm(Max)

External Antenna Type
Two fixed reverse SMA external antenna

Advanced Firewall Features
- NAT with VPN Pass-through (Network Address Translation)
- MAC Filtering
- URL Filtering
- Scheduling

Operating Temperature
32°F to 129 °F (0°C to 40°C)

Humidity
95% maximum (non-condensing)

LEDs
- Power
- Status
- Internet
- WLAN (Wireless Connection)
- LAN (10/100)

Dimensions
- L = 197.82mm
- W = 133.18mm
- H = 28.91mm

Weight
0.288kg

Warranty
1 Year

* Maximum wireless signal rate derived from IEEE Standard 802.11b, 802.11g and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by DLink in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim:

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. DLink will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply.
This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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